

University of Alberta Library



0 1620 2862541 4

C11940



EX LIBRIS
UNIVERSITATIS
ALBERTENSIS

The Bruce Peel
Special Collections
Library

THE UNIVERSITY OF ALBERTA
MDes FINAL VISUAL PRESENTATION

By

BLAINE ARTHUR BERTSCH

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH IN
PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF DESIGN

IN

VISUAL COMMUNICATION DESIGN
DEPARTMENT OF ART AND DESIGN

EDMONTON, ALBERTA

SUMMER 2007




THE UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled:

Final Visual Presentation

Submitted by Blaine Arthur Bertsch in partial fulfillment of the requirements for the degree of Master of Design.



Digitized by the Internet Archive
in 2024 with funding from
University of Alberta Library

<https://archive.org/details/Bertsch2007>

THE UNIVERSITY OF ALBERTA

RELEASE FORM

NAME OF AUTHOR: BLAINE ARTHUR BERTSCH

TITLE OF THESIS: FINAL VISUAL PRESENTATION

DEGREE FOR WHICH THESIS WAS GRANTED: MASTER OF DESIGN

YEAR THIS DEGREE WAS GRANTED: 2007

Permission is hereby granted to THE UNIVERSITY OF ALBERTA LIBRARY to reproduce single copies of this thesis, and to lend or sell such copies for private, scholarly, or scientific research purposes only.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

University of Alberta
Department of Art and Design

Final Visual Presentation for the degree
of Master of Design

Blaine Bertsch
Visual Communication Design
2007

Designing messages to communicate
the cost of traffic collisions to generate
public support for traffic safety action

COLLI\$ION

Acknowledgements

I would like to thank Jorge Frascara for involving me in his research. His insight into the problem of traffic safety and vision for addressing the issue is truly innovative. I wish him the best of luck! The University of Alberta will miss him.

I am very grateful to Jorge Frascara and Bonnie Sadler Takach for their unending patience and insight. This experience has been extremely valuable to my understanding of the design process.

Throughout this process, I relied upon the support of my wife Heather and my parents Llew and Joyce. Thank you for your words of encouragement and patience.

I would also like to thank my business partner, Tom Dodd for his support while I juggled both work and academics.

Abstract

The focus of this exploratory study was on how adults respond to messages that communicate the monetary costs of traffic collisions in Alberta. To what style of written arguments are they most sensitive? Is the integration of an image useful? Is there a style that makes an image more effective in communicating the message? What style and subject in an image is most effective in eliciting a response?

Posters were designed for qualitative evaluation by two focus groups of 27 adults from the general public. A design style chart was developed to help determine content and design choices. An experienced moderator managed each focus group session. Audio was recorded and written notes were taken.

General themes were observed during the sessions and confirmed in the transcripts. It appeared that adults responded favourably to messages documenting the cost of traffic collisions and were most sensitive to written arguments that used a comparison. Images directly related to the text appeared to improve comprehension of the message. Finally, the integration of an image appeared useful, particularly when the subject of the image was emotionally engaging and featured people. A set of suggestions was created for possible use in further research.

Table of Contents

1. Overview

2. Introduction

- 2.1 The role of visual communication design in addressing social issues
- 2.2 Identification of a design problem: traffic safety

3. Background Research

- 3.1 Scope of the traffic safety problem
- 3.2 How traffic safety has been addressed in other jurisdictions
- 3.3 The traffic safety problem in Alberta
- 3.4 The cost of traffic collisions in Alberta
- 3.5 Topics for comparison

4. Questions to Explore In This Study

- 4.1 Alternative option to address traffic safety through communication design
- 4.2 Research questions

5. Design Strategies

- 5.1 Design style chart
 - 5.1.1 Variable pairs (1-3) in the design style chart to help write messages
 - 5.1.2 Variable pairs (4-5) in the design style chart to help select images
- 5.2 The written content of the messages
- 5.3 The visual presentation of the messages
 - 5.3.1 Design of the text-only posters
 - 5.3.2 Design of the image-inclusive posters
 - 5.3.3 Selecting the images for image-inclusive posters
 - 5.3.4 Integrating images for the image-inclusive posters

6. Evaluation

- 6.1 The process for conducting two focus groups
- 6.2 Analyzing the transcripts
- 6.3 Discussion of themes
 - 6.3.1 The response of adults to messages that communicate the monetary costs of traffic collisions in Alberta
 - 6.3.2 The style of written arguments to which adults are most sensitive
 - 6.3.3 The usefulness of integrating an image
 - 6.3.4 The style that makes an image most effective in communicating a message
 - 6.3.5 The type of content in an image that is most effective in eliciting a response
- 6.4 Other observed themes
 - 6.4.1 Message clarity
 - 6.4.2 Writing a relevant message
 - 6.4.3 Using emotional appeal
- 6.5 Themes that could lead to future research
 - 6.5.1 Including a graphic message in the form of a visual identity
 - 6.5.2 Discussing the success of other jurisdictions in reducing the number of traffic collisions
 - 6.5.3 The opportunity to conduct quantitative research to explore communicating the cost of traffic collisions to the general public

7. Conclusion

- 7.1 Summary
- 7.2 Limitations
- 7.3 Opportunities for further study
- 7.4 Final comments

References

Bibliography

Appendices

- 1. Focus group transcripts
- 2. Message posted at the University of Alberta campus
- 3. Letter mailed to the Alberta Motor Association list
- 4. Reply form
- 5. Letter to participants
- 6. Response letter to volunteers who requested parking
- 7. Response letter to volunteers who did not request parking
- 8. Letter of agreement
- 9. Opening statement
- 10. Focus group opening questions
- 11. Receipt
- 12. Ethics form

Designing messages to communicate the cost of traffic collisions to generate public support for traffic safety action

1. Overview

In the spring of 2004, as I was beginning to search for a problem to study for my thesis project, I was intrigued by a discussion with Professor Jorge Frascara that focused on traffic safety. He described a situation in which specific foreign ad campaigns that dealt with human suffering through injuries and deaths were highly successful in reducing the number of collisions, but did not necessarily result in local investment in the problem. As an alternative, he developed the idea of using the monetary cost of traffic safety as a way to motivate the public to put pressure on local government to invest significantly in programs addressing traffic safety. Professor Frascara offered me the opportunity to explore this tactic.

In response, I developed a process that consisted of: researching the monetary cost of traffic collisions; researching topics for comparison in written messages; developing a style chart to help select figures and images; writing and designing messages in the form of posters; conducting a focus group to observe and record participants reactions to the messages; evaluating the responses to identify themes and developing a set of suggestions for future studies with a similar approach.

During my research into the problem of traffic safety, I found some staggering statistics that document the human as well as the monetary cost of collisions. Internationally, over 1 million people die from injuries sustained in traffic collisions every year. On a local scale, over 100,000 automobile collisions occur in Alberta annually killing 400 people and injuring 27,000. (Anielski, 2004, 10-11)

From government statistics, research papers and interviews, I gathered collision related-costs consisting of large, overall costs, overall costs to the province as well as smaller costs related to individual collisions. In addition to the direct costs of collisions I gathered the costs that are indirectly incurred through collisions.

I chose cost-related figures, both large and small, that I felt would have an impact. I determined these choices through seeking the largest, overall figures, as well as costs that could be related on a personal level, such as those for a single collision or injury. For comparison purposes, I also selected costs that fell in between the extremes and related to non-injury collisions.

I predicted that using visual messages that use a comparison between the cost of healthcare and the cost of traffic collisions could strike an emotional chord with Albertans. Likewise, I selected the topic of education for use in comparison messages.

By focusing on the tactic of communicating the monetary cost of traffic collisions to the general public, I was hoping to gain insight into the following exploratory questions:

In what way do adults respond to messages that communicate the monetary costs of traffic collisions in Alberta?

To what style of written arguments are they most sensitive?

Is the integration of an image useful?

Is there a type of style that makes an image more effective in communicating the message?

What type of content in an image is most effective in eliciting a response?

Messages in the form of posters were designed for evaluation by focus groups. The first step in the process of designing the posters was to write messages that could communicate the monetary cost of collisions to Albertans. I developed a design style chart to help me make choices about the style of messages and the actual figures to be used, as well as the style and content of images to be paired with the text messages. The design style chart also proved useful in identifying themes to watch for during the focus group sessions.

Initially eight written messages were developed based on a set of variables that I considered useful to explore. These factors are documented in the first three pairs of variables of the design style chart. To evaluate the response of the participants in the focus group, I watched for themes indicating an overall preference for one variable versus another.

The first pair of variables dealt with the content of the message written in the form of a comparison versus a message that wasn't a comparison. The second set of variables dealt with whether the text presented a percentage or a direct number. The final set of variables for the written content of the message related to the relative size of the number in the message.

The final two pairs of variables in the design style chart dealt with the addition of an image to each written message. The first variable compared the effectiveness of using a highly illustrative image to denote the written message, while the final pair of variables was used to evaluate the participants' preference an image that featured people.

A visual system consisting of common colours, type style, general layout, orientation and a visual identity was designed to tie the messages together in a related set. This system served to create a visual uniformity among the posters and maintain a focus on the style of the posters, the content of the written messages and the selection of images. The physical size and format for the messages was designed to be suitable for viewing across a table in a focus group setting, as well as up close when the messages were held in hand by each participant.

Two sets of posters were designed. The first set consisted of posters that contained text only, while the second set included an image and text pairing.

For the text-only posters, I created a visual system to minimize visual impact and emotional engagement. I used a grid to place the text in the centre of the poster on a white background and selected Adobe Caslon Semi-bold, a black, serif typeface, in order for the text to appear factual and academic in nature. A red border around the outside of the poster and the inclusion of the visual identity tied the text-only posters together, and connected them to the second set of posters that included images.

For the second set of posters, the inclusion of an image and choice of the overall design, were intended to increase the urgency and the emotional appeal of each message compared to the simplified and factual approach of the text-only posters. To create the image-inclusive posters, I developed a formal visual system that used a grid to help place the text and images. To increase the emotional appeal of this set of posters, I used reversed type on a black background. I intended for each poster to appear visually interesting on its own. I used an interaction of the black background, that covers the left third of the poster, with the image that takes up the right two-thirds of the poster to create visual interest. Whether the image was bounded by the grid fields or was close-cropped, to integrate with the text, depended on the chosen effect, to create interest.

Using a qualitative approach, two focus groups were conducted to evaluate the messages. These focus groups were comprised of 27 adult members of the general public. An experienced moderator managed each focus group session, offered an excellent opportunity to learn how to moderate a focus group and provided an unexpected benefit of allowing me to carefully observe and document participants' reactions. Another graduate student acted as a research assistant, taking additional written notes.

Participants were first presented with text-only messages and then with image-inclusive messages.

Both my observations and written notes from the sessions were key to identifying themes. During the analysis of the transcripts from the recording, I confirmed many of the themes observed, and discovered other interesting themes that initially had gone unnoticed.

Based on the animated and pointed discussion among the participants, they appeared moved by the messages. Overall, the members of the focus groups tended to respond favourably to the messages documenting the cost of traffic collisions.

It appeared that participants had a stronger response to particular styles of written arguments that originated in my design style chart.

First, a number was used to report the cost of collisions in monetary terms. When the cost was in a second case compared to the cost of a commonly discussed service, such as education or healthcare, the message appeared to be more effective in generating a response and discussion among the participants. Overall, the messages that used a comparison in their written structure prompted the most discussion and greatest emotional response.

The second variable pair in the design style chart dealt with comparing messages that contained a figure as a percentage in comparison to messages that did not. Neither option appeared to elicit a strong preference among participants in either focus group.

The final style of written argument that the participants appeared to strongly react to related to the size of numbers in the text. The costs of collisions were communicated in both small, personal and easy-to-comprehend numbers, such as a

number of the cost of 31 MRI scans, up to numbers in the billions that are difficult to imagine. Although I was concerned that the enormous numbers may simply be too large to have any real impact, I found that many of the participants reacted very strongly to those messages. Although there seemed to be a number of comments in favour of using larger numbers, that was not necessarily the consensus.

It appeared that using an image in the message was useful for generating discussion, particularly when the subject of the image was emotionally engaging and featured people. The selection of imagery ranged from the literal, such as a teacher in a classroom with a message specifically discussing teachers, to the nearly abstract image of a close-up view of a dented car door. Overall, participants indicated that the unrelated image was not very effective.

Finally, images directly related to the text appeared to improve the communication of the text, resulting in a more effective message.

Other themes were observed during the sessions. First, it is essential to write messages that are concise and clear. This suggestion may seem self-evident, but through the course of the focus groups, I found that messages I thought were very clear, could cause confusion in unexpected ways.

Second, messages should relate personally to the viewer. Often a single message that was dismissed by some would find a number of champions within the group.

Finally, the use of an emotional appeal appeared to generate more discussion, personal stories and comments that indicated emotional engagement with a message. The messages that dealt with injury collisions seemed to be more effective than those that dealt with non-injury collisions.

There are limitations to this study. First, the messages were evaluated by a small number of participants in a qualitative focus group setting. Second, the results are based on observation and analysis of transcripts which is insightful, but limited in scope. Finally, no demographic information was collected as the number of participants in the study was not statistically valid. This study was an exploration of a tactic aimed at the general public and not about how different target groups might react to the messages or change their driving behaviour.

Two themes emerged that could be the focus of further research. First, connecting the campaign with a strong visual identity generated some discussion. The participants may have been influenced by the appearance of an official organization being responsible for the messages. Could a visual identity contribute to the credibility of the messages? In addition, the visual identity was a message on its own. Could the identity be a successful message on its own or paired with the inclusion of an image without an included text?

Second, it appeared that the participants were more engaged in the topic once they knew that the situation had been successfully addressed in other jurisdictions. The participants may have felt empowered by the knowledge that collisions can be reduced through investment in enforcement, road design and communications.

Would a campaign be more effective if some of the messages communicated success stories or other jurisdictions?

Additionally, the suggestions that were a result of observed themes could be explored with a quantitative approach. This approach could provide further insight and possibly confirm the suggestions noted in this study. Quantitative data may be useful for funding agencies that require documentation of results. A quantitative approach could include a greater number of focus groups in addition to personal interviews, questionnaires and surveys that collect demographic data. This process could help to verify themes.

Opportunities exist to further explore the approach of communicating the monetary cost of traffic collisions to empower the public. Further insight into the tactic may help to confirm whether the tactic is an effective approach to empower the public, as well as to fine-tune the messages to make them stronger in eliciting a response. It may be useful to test the tactic of communicating the cost of traffic collisions to empower the public through collaboration with other experts. This process could allow for an integrated approach, such as including newspaper, magazine and online articles, television and online video messages, radio, podcasts, blogs, online forums, posters, billboards and art installations.

As designers, we can seek out innovative approaches to design with the goal of helping to address serious social issues. A designer's ability to develop a process that addresses the unique challenges of a particular problem is a necessary skill to develop.

To gather insight into the response of the general public to the messages which communicated the cost of traffic collision, I explored whether the tactic may be an effective way of empowering the public by providing information on which they could act.

2. Introduction

2.1 The role of visual communication design in addressing social issues

Visual communication design can play a key role in addressing social problems by empowering people with information. Messages that are created by designers cover a wide range of media, from print materials, signs and posters, to digital messages presented through different types of networks. Each medium must meet the same basic criteria for the creation of effective design. The written or verbal content of the message needs to be carefully crafted to communicate a specific message with clarity and impact. The visual presentation, such as the inclusion of a photograph, illustration, video or animation must be engaging and appropriate for the content of the message. In the context of this project, I use the term "messages" when I refer to the visual media that are created to explore the tactic that communicates cost

of collisions. It is possible that this tactic may be a valid approach across all sorts of communication media.

To create effective messages, visual communication designers must develop and follow a design process where the response of the messages can be evaluated “to verify whether or not the population has indeed been affected” so that the messages can “be adjusted and improved, and effectiveness and efficiency maximized.” (Frascara, 1997, 11) In this study, I explored the tactic of communicating the cost of traffic collisions to gather insight into the response of the general public to the messages. The goal was to evaluate whether the messages that communicate the cost of traffic collision may be an effective way of empowering the public with information that they can act on.

2.2 Identification of a design problem: traffic safety

As I noted earlier, Professor Jorge Frascara described some highly successful foreign traffic safety campaigns that significantly reduced the number of collisions in their jurisdictions, however, their success did not necessarily result in local investment in the problem. In response, Frascara developed the tactic of communicating the monetary cost of traffic collisions to the general public, in order to empower them to put pressure on the local government to significantly invest in traffic safety programs. I accepted his offer to explore this tactic in a research project.

Traffic safety shares a number of key issues with many other social problems. Traffic collisions injure and kill a large number of people locally and globally every year. Human suffering extends beyond the victim onto the victim’s family, friends and acquaintances, with long-lasting and devastating effects. Likewise, the monetary cost of collisions not only affects the victim, but their family and co-workers, as well as public and government organizations.

For this study, I developed a design process for exploring the tactic of communicating the cost of traffic collisions with the general public to empower them to act. This action could include: lobbying the government, supporting organizations dedicated to reducing traffic collisions and seeking a voice in the media through avenues, such as letters, phone calls and blogs. The process consisted of researching the monetary cost of traffic collisions; researching topics for comparison in messages; developing a style chart to help select figures and images; writing and designing visual messages in the form of posters; conducting a focus group to observe and record participants reactions to the messages; evaluating the responses to identify themes and developing a set of suggestions for future study with a similar approach.

3. Background Research

3.1 Scope of the traffic safety problem

Traffic collisions are a massive social problem. Internationally, approximately 1.2 million people die from injuries sustained in traffic collisions every year. On a global scale, over 700,000 people, aged 15-29, die every year from HIV/AIDS, the leading cause of death in this age group. Traffic collisions are the second leading cause of death, killing over 300,000 young people annually. (Peden, 2004, 28)

On a local scale, traffic collisions exact a heavy toll on Alberta's roads with few other causes maiming and killing people at such a drastic rate. Approximately 110,000 automobile collisions occur in Alberta every year. Within those incidents, 400 people are killed and 27,000 injured. (Anielski, 2004, 10-11) Property damage, injuries and death not only affect the victims involved in the collision but inevitably, have substantial effects on their family, friends and co-workers. A single incident can lead to severe emotional and physical distress on a temporary and/or permanent basis.

In addition to human suffering, a single traffic collision can lead to a dramatic loss of productivity for those involved. Days of work are missed, not only due to the funerals and the treatment of injuries, but for court dates and vehicle repairs. Missed school days leave students behind on course work and teachers responsible for keeping their students on schedule in their studies.

The World Health Organization (WHO) estimates that the global cost of traffic collisions is \$518 billion on an annual basis. (Peden, 2004, 29) It is estimated that "the direct societal costs of motor vehicle collisions to Albertans [was] as much as \$4.68 billion or 2.4% of Alberta's Gross Domestic Product (GDP) in 2002." (Anielski, 2004, 7) As costs reach the billions of dollars, services are invariably affected. From the lack of funding for capital projects to an ever-tightening budget for education and health care, Albertans are negatively affected through a loss in their quality of life.

With over 100,000 collisions on Alberta's roads every year and each incident affecting numerous people, it is apparent that traffic collisions continue to have a substantial effect on the everyday lives of Albertans. From simple inconveniences to severe emotional and physical suffering, along with a massive monetary cost, traffic collisions demand action.

3.2 How traffic safety has been addressed in other jurisdictions

The problem of traffic safety has been successfully addressed in many areas of the world with significant reductions in collisions. Of particular note, a traffic safety initiative, which included both a social marketing campaign as well as traffic law-enforcement in the State of Victoria in Australia during the early 1990s, resulted in significant reductions in collisions. The communications campaign primarily used television, press, radio, and outdoor signs to relay the messages. (Advertising Federation of Australia, 1990, 195) Through increased traffic law enforcement, combined with a social marketing campaign targeting high-risk drivers, Victoria saw

a reduction in collisions of 49%, fatalities reduced by 54%, hospitalization reduced by 40% and the state saved an estimated \$2 billion. This reduction in collisions cost an annual investment of \$12 to \$20 million. (McDermid, 2004, 15)

Western Europe has been particularly successful in reducing the rates of traffic collisions. France reduced their rate by 20% in 2002–03. The Netherlands, Sweden and the UK have the lowest death rates per 100,000, ranging from 5.9 in the UK to 6.8 in the Netherlands. In stark contrast, the United States has over doubled the death rate (15.2) of the Netherlands while El Salvador has a death rate of 42.2 per 100,000. (Peden 2004, 59)

A dramatic reduction in traffic collisions has been achieved in some jurisdictions of North America as well. Peoria, Illinois reduced traffic collisions by 21% between 1994 and 1996 through increased traffic enforcement combined with significant media attention on the increased enforcement during the campaign. (Anielski, 2004, 40)

The WHO has undertaken an in-depth study on the effects of traffic collisions on a global scale along with a clearly defined set of recommendations for reducing traffic collisions. In the context of visual communication design, it may be useful to understand the overall action for addressing traffic safety and how visual communication design may fit into that model. These recommendations are based on their research into successful traffic safety initiatives that began in the 1960s. (Peden, 2004, 31) The WHO recommends the following action, which describes the problem from a multi-disciplinary approach:

1. *Crash injury is largely predictable and largely preventable. It is a problem amenable to rational analysis and remedy.*
2. *Road safety policy must be based on a sound analysis and interpretation of data, rather than on anecdote.*
3. *Road safety is a public health issue that intimately involves a range of sectors, including that of health. All have their responsibilities and all need to be fully engaged in injury prevention.*
4. *Since human error in complex traffic systems cannot be eliminated entirely, environmental solutions (including the design of roads and of vehicles) must help in making road traffic systems safer.*
5. *The vulnerability of the human body should be a limiting design factor for traffic systems, i.e. for vehicle and road design, and for setting speed limits.*
6. *Road crash injury is a social equity issue, with vulnerable road users bearing a disproportionate share of road injury and risk. The objective must be equal protection.*
7. *Technology transfer from high-income to low-income countries must be appropriate and should address local needs, as determined by research.*
8. *Local knowledge needs to feed into the implementation of local solutions.*
9. *In addition, the formidable challenge of reducing the level of human loss on the roads requires the following to be developed:*
 - *increased capacity for policy-making, research and interventions, in both the public and private sectors;*

- *national strategic plans, incorporating targets where data allow;*
- *good data systems for identifying problems and evaluating responses;*
- *collaboration across a range of sectors, including the health sector;*
- *partnerships between public and private sectors;*
- *accountability, adequate resources and a strong political will. (ibid., 49)*

Opportunities for visual communication design to help address the situation of traffic safety may present themselves in the previous list. For instance, in items 1 and 2 in the above list, visual communication design could be used to clearly communicate the issues that require analysis by researchers, policy makers and the media. Item 4 in the above list offers an opportunity for designers to improve the design of sign systems, which may contribute to reducing human error on the road.

According to the WHO, policy makers play an important role in the reduction of traffic collisions. The WHO notes that there does not seem to be a meaningful debate or investment in traffic safety on a global scale. HIV/AIDS organizations receive nearly one billion dollars per year while organizations that deal with traffic collisions receive only \$24 to \$33 million per year for research and development. (ibid., 31) There may be a role that visual communication can play by informing the public of the action that policy makers can take to address the issue of traffic safety. Specifically, the WHO recommends that government take the following action:

Make road safety a political priority.

Appoint a lead agency for road safety, give it adequate resources, and make it publicly accountable.

Develop a multidisciplinary approach to road safety.

Set appropriate road safety targets and establish national road safety plans to achieve them.

Support the creation of safety advocacy groups.

Create budgets for road safety and increase investment in demonstrably effective road safety activities. Policy, legislation and enforcement.

Enact and enforce legislation requiring the use of seat-belts and child restraints, and the wearing of motorcycle helmets and bicycle helmets.

Enact and enforce legislation to prevent alcohol-impaired driving.

Set and enforce appropriate speed limits.

Set and enforce strong and uniform vehicle safety standards.

Ensure that road safety considerations are embedded in environmental and other assessments for new projects and in the evaluation of transport policies and plans.

Establish data collection systems designed to collect and analyze data and use the data to improve safety.

Set appropriate design standards for roads that promote safety for all.

Manage infrastructure to promote safety for all.

Provide efficient, safe and affordable public transport services.

Encourage walking and the use of bicycles. (ibid., 183)

3.3 The traffic safety problem in Alberta

Jorge Frascara began studying the problem of traffic safety in 1987. He served on a committee called Mission Possible led by the Alberta Motor Association Association and included representatives from the Royal Canadian Mounted Police (RCMP), Alberta Health and Alberta Transportation. The Mission Possible committee lobbied for funding for various programs addressing the issue of traffic safety. Their request for funding was largely based on the success of other international jurisdictions that have significantly reduced the number of collisions through investment in local programs. According to Frascara, representatives of the Alberta Government promised funding for programs but never delivered them "in any real way". (Conversation with Jorge Frascara, 2004) He noted that "the public should be made more aware of their basic rights and obligations," but that "the lack of interest of most governments in long-term efforts, particularly when these have no consequence on immediate elections" is hampering the effort. (Frascara, 1997, 32)

Based on his observation of the lack of "long-term effort" by the Government of Alberta, Frascara determined that a different tactic might be required. (ibid., 32) Through his research, he focused on an alternative to targeting high-risk groups directly. He suggested targeting the general public to create discontent, to encourage the public to put pressure on the government for action. (Conversation with Jorge Frascara, 2004)

Don McDermid agreed with Frascara's assertion noting that the Government of Alberta has, thus far, resisted any substantial investment in traffic safety. In his report "Saving Lives on Alberta's Roads," McDermid noted that the Government of Alberta has endorsed a new national initiative to reduce traffic collisions called Road Safety 2010. Unfortunately, it appears that "no specific strategies have been developed to ensure that the targets can be met." (McDermid, 2004, 14) Only \$2.4 million is spent on programs addressing traffic collisions, yet over \$130 million is collected through traffic fines and tax on insurance premiums. (ibid.) The State of Victoria in Australia, which is similar in population, produced significant reductions in collisions, injuries and deaths as well as a \$2 billion savings, with an investment of up to \$20 million annually. (ibid., 23)

McDermid makes nine recommendations to the provincial government for a comprehensive traffic safety plan. In the context of traffic safety in Alberta, policy makers can take action through the following recommendations:

1. *Establish a provincial mechanism to provide leadership, direction, coordination and evaluation of road safety initiatives in Alberta.*
2. *Develop and implement a comprehensive road safety plan for Alberta with clearly defined objectives, strategies and work plans tailored to meet provincial and local needs.*
3. *Establish a sustainable source of ongoing funding for road safety initiatives in the province.*
4. *Establish research and the availability of comprehensive, timely information about road safety in the province.*

5. *Establish specific targets consistent with Road Safety Vision 2010 and report regularly on progress in achieving those targets.*
6. *Engage Aboriginal leaders and elders in the development of targeted strategies to reduce the rates of collisions, injuries and fatalities among Aboriginal people.*
7. *Take advantage of advances in technology provided the objectives are directly related to improving road safety.*
8. *Ensure that adequate resources are available to provide effective enforcement on Alberta's roads and highways.*
9. *Undertake a thorough review of current driver education and driver examinations in the province. (ibid., 5)*

It is possible that the general public in Alberta could be empowered with information to lobby the government for investment in traffic safety initiatives. Recommendations from both the WHO as well as those outlined in the McDermid report provide a starting point for action.

3.4 The cost of traffic collisions in Alberta

To create messages that document the cost of traffic collisions to Albertans, an overall picture of the costs was necessary. Government statistics, research papers and interviews were reviewed to gather collision-related costs that were both large, overall costs to the province as well as smaller costs related to individual collisions. Costs that were indirectly incurred through collisions were also collected. Once I gathered and organized large and small numbers, I determined the costs that I felt would have an impact in written messages. I determined these choices through seeking the largest, overall numbers that documented the cost of collisions, as well as costs that could be related on a personal level, such as those for a single collision or injury. I also selected costs that fell in between the extremes, as well as those that were related to non-injury collisions for comparison purposes.

Numerous sources document the monetary cost of Alberta's traffic collisions with different organizations offering a portion of the overall picture. These sources include Alberta Health and Wellness, Alberta Transportation, Pembina Institute, Alberta Motor Association, Department of Public Health Sciences at the University of Alberta, Institute of Health Economics in Edmonton and Alberta Centre for Injury Control and Research. The most recent statistics from many of these sources are available online while others are found in papers available through the University of Alberta library database system.

According to Alberta Health, \$400 million or 22% of the total cost of unintentional injuries were a result of traffic collisions. This includes \$115 million in direct medical costs, while the balance accounts for indirect disability costs. (Albert, 2002, 3) When long-term care for severe injuries is added to that figure, Alberta's health care insurance system is responsible for paying over 1.6 billion dollars on an annual basis. (Jacobs, 2004, 1101) These figures may cover only a portion of the medical costs to Alberta Health. As noted by Philip Jacobs, "provincial medical costs refer to those costs which are funded by Alberta Health through the provincial health

plan" that are directly attributed to a traffic collision on the medical report. (Jacobs, 2000, 3) Jacobs noted that injuries from a collision could last many years where the injury is no longer documented as a result of a collision. (ibid.) Discrepancies arise between health jurisdictions as well. Anielski stated that "capital health assessed the hospitalization costs of a vehicle crash at roughly \$10,000 per bed while at Calgary Health, the costs of emergency and direct inpatient hospital costs related to motor vehicle collisions was estimated at \$13,800 per patient." (2004, 13) Both estimates were supplied directly from each board of health yet there was a variance in estimated cost. Nonetheless, the estimated cost was substantial.

Data compiled from insurance claims offer a detailed cost analysis, which includes property damage and health costs. The direct cost to the Alberta insurance industry on an annual basis through insurance claims was over \$1 billion in 2001. (ibid., 14) Alberta insurance companies have seen a 347% increase in insurance claims and 124% rise in the cost of premiums from 1986 to 2001. (ibid.) On average, the 88,000 non-injury collisions in Alberta every year cost \$6,800 each in property damage. (ibid., 13) These figures do not include police and fire department response, and legal fees. Total costs can be difficult to quantify due to confidentiality and legal issues. (Jacobson, 2004, 1) Further difficulties arise in compiling the overall cost when police and fire department jurisdictions are separate from each other. The RCMP reported the costs from areas they patrol, which excludes municipalities possessing their own police force.

Alberta Transportation provided their own estimates of the total cost of traffic collisions in Alberta. They estimated that an average cost for a fatal collision was \$3.8 million, the average cost of an injury collision to be \$100,000 and an average cost of \$12,000 for each collision that resulted in property damage only. (Alberta Transportation, 1995, 4)

Anielski found during his research on the cost of traffic collisions in Alberta that there is "no consistent and comprehensive understanding of the direct and indirect costs related to motor vehicle collisions, except that current estimates indicate that these costs are under measured." (2004, 13) A conservative estimate revealed a cost averaging around \$3.5 billion between 1967 and 1999. Although the exact cost of traffic collisions may never be known, and is likely under-measured, it is clear that Albertans are responsible for a burden of cost that has a dramatic effect on the provincial budget and services. (ibid., 16)

3.5 Topics for comparison

In seeking topics for comparison to the cost of traffic collisions I identified two apparent concerns for Albertans. First, I predicted that using visual messages that use a comparison between the cost of healthcare and the cost of traffic collisions could strike an emotional chord with Albertans. Healthcare is a key service to members of the general public and it is often a central topic during provincial elections. Specifically, there is often a call for increased funding for healthcare in the local media. In 2001, healthcare in Alberta cost an estimated \$6.87 billion

dollars. (Government of Alberta, 2004) On an individual basis, Alberta Health costs each hospital bed at \$314,285 per year while each MRI scan averages a cost of \$535. (ibid.) According to the Rick Hansen Foundation, a single spinal cord injury costs between \$1.25 million and \$25 million for care administered over a patient's lifetime. (rickhansen.com, 2004)

A second topic of concern I have identified in Alberta deals with the limited budget for education. The topic garners similar attention in the media, particularly during elections. As with healthcare, education is seen as a key service for Albertans. Specifically, the cost of education for students in kindergarten through to grade 12 is approximately \$4 billion every year in Alberta. A common theme of discussion relates to the number of students in each classroom. Pressure from the public through the media pays particular attention to the number of teachers employed by Alberta Education. The cost of a new teacher with four years of education is \$42,867 per year while the cost for a teacher with six years of education and 11 years of experience is \$72,894 per year. (Government of Alberta, 2004)

Figures from these two key topics of health care and education will serve as comparisons in the written messages that document cost of traffic collisions in Alberta.

4. Questions to Explore in This Study

4.1 Alternative tactic to addressing traffic safety through communication design

Rather than communicating directly with high-risk drivers, this study explored the response of members of the general public to a series of messages that communicated the monetary cost of traffic collisions. This study was the first step in exploring the tactic that is based on communicating the high cost of the traffic safety problem to the general public to empower them to pressure policy makers for investment in traffic safety initiatives. Specifically, in this study, I explored how members of the general public reacted to the tactic, which style of written messages they preferred and which style of image was most effective. I watched for responses that indicated discontent with the cost of collisions in Alberta and whether or not the Government of Alberta was perceived as part of the problem.

4.2 Research questions

I developed several key questions to explore the tactic of targeting the general public with visual messages that communicate the cost of traffic collisions in Alberta. These questions were central to developing a design style chart to help identify styles of written messages and images that would be useful to explore. The research questions also served as possible themes that might emerge during my observation of the focus groups.

Research questions:

In what way do adults respond to messages that communicate the monetary costs of traffic collisions in Alberta?

To what style of written arguments are they most sensitive?

Is the integration of an image useful?

Is there a type of style that makes an image more effective in communicating the message?

What type of content in an image is most effective in eliciting a response?

5. Design Strategies

To explore the research questions in this study, I needed to create messages that would function effectively in a focus group setting. First, I sought research that could provide recommendations for developing written and image-based messages.

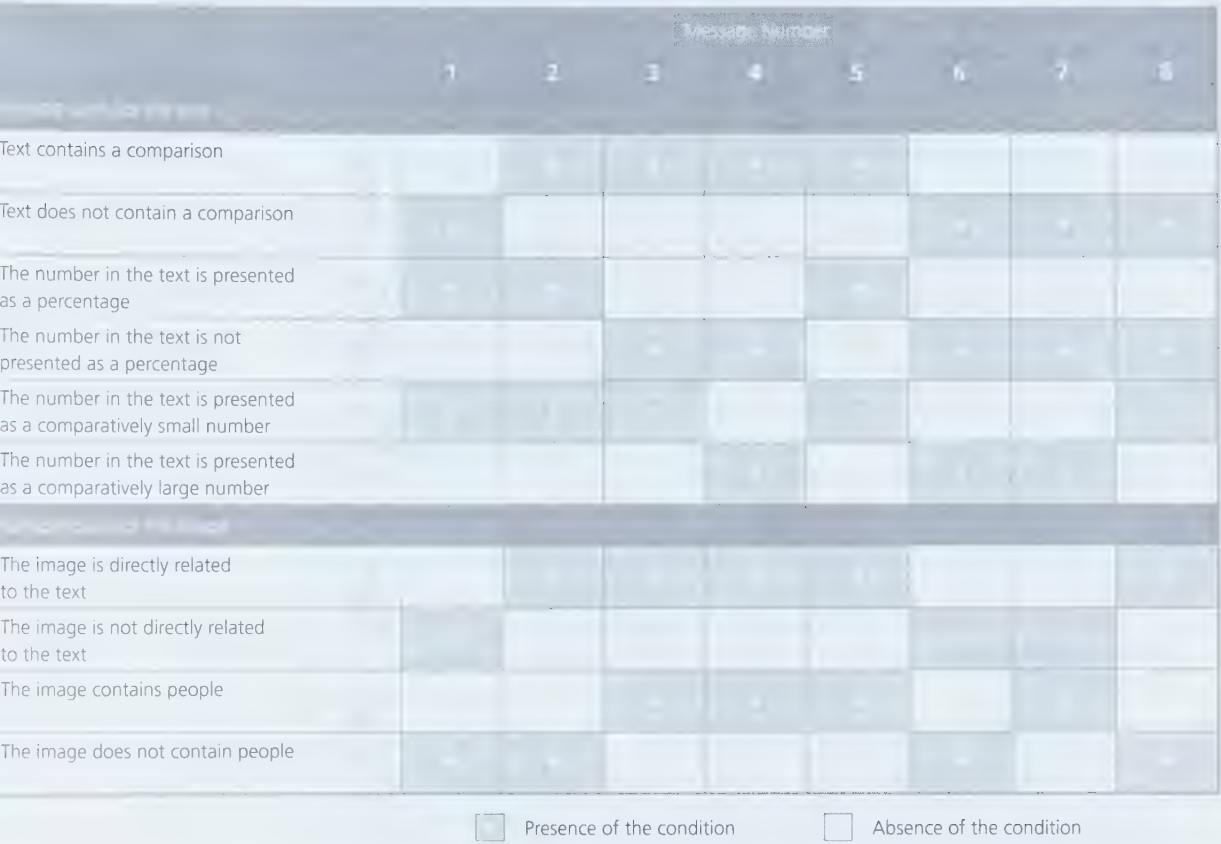
Although the studies that I reviewed focused on people at a high level of risk in an attempt to alter their dangerous behaviour, their recommendations for communications that address social issues were insightful in the development of messages for this study. (Delaney, 2004, 1) Delaney stated that "message content needs to be realistic and credible, portraying members of the target group" (ibid., 22) As my study targeted the general public in Alberta, the messages I developed focused on Alberta-based statistics and issues. According to researchers at Monash University Accident Research Centre, creating "campaigns with a persuasive orientation and those that use emotional rather than rational appeal tend to have a greater impact on the relevant measure of effect." (ibid., 60) For a campaign dealing with the costs of traffic collisions to have an emotional effect, I related the messages of cost to topics of local importance along with messages that deal with injuries. Specifically, the issues of healthcare and education appeared to be topics that garner much attention in the local media, as well as during past political elections.

Additionally, "consistent slogans, new information and realistic, credible messages are all recommended to increase campaign impact." (ibid., 22) This study incorporated information about the monetary cost of traffic collisions in Alberta. As a new way of relaying information to the public, the traffic safety messages provided cost comparisons and consistently dealt with cost issues only.

Finally, the use of a comparison in a message is critical to engage the viewer to "thoughtfully" consider the content, thereby leading to a higher degree of change in attitude. (Bator & Cialdini, 2000, 530) I used comparison arguments in my written messages.

Based on these recommendations along with the facts primarily documenting the costs related to traffic collisions, healthcare and education in Alberta, I developed a design style chart to help me create written and visual messages.

Fig. 1: Design style chart
 Variables pairs used to help select written message and image styles



5.1 Design style chart

The first step in the process of designing the posters was to write messages that could communicate the monetary cost of collisions to Albertans. I developed a design style chart to help me organize the style of messages that I intended to write, as well as select and organize the actual numbers that I intended to use. (Fig. 1)

The design style chart consisted of a table containing five pairs of variables that were cross-referenced with eight messages. I determined that eight messages would be a manageable number to present in an hour-long focus group without rushing the conversation or overwhelming the participants, thereby allowing enough time and content to explore all of the variables.

The first three variable pairs in the design style chart explore the questions of style as it pertains to written arguments documenting traffic costs, and to which styles adults are most sensitive.

In addition to helping me write messages, the last two variable pairs in the style chart were used to select the style and content of images to be combined with the text messages. More specifically, these two pairs of variables helped to address two of my research questions: what type of content in an image is most effective in eliciting a response, and, is there a type of style that makes an image more effective in communicating the message?

5.1.1 Variable pairs (1-3) in the design style chart to help write messages

Variable pair 1 in the design style chart dealt with the content of the message written in the form of a comparison versus a message that was not. As seen in the top line of the chart, messages 2, 3, 4 and 5 all contain a comparison in the written message. (Fig. 1) I expected these messages would prompt more discussion as they placed the cost of traffic collisions into a context relating to local concerns. The messages that did not contain a comparison were written in a clear and direct manner that documented the key costs of traffic collisions. I was wondering whether these messages would resonate with the participants through their direct and factual nature and whether the large cost was enough to create an emotional response such as outrage.

Variable pair 2 dealt with the text presented as either a percentage or a direct number. Messages 1, 2 and 5 presented the cost in terms of a percentage. (Fig. 1) I was curious about the way the participants would react to a cost written as a percentage versus a direct number. In this case, I did not have an assumption of which style of message the participants would tend to prefer.

Variable pair 3 dealt with the written content of the message as it relates to the relative size of the number in the message. Messages 3, 5 and 8 all contained a number that was relatively small compared to messages 1, 4, 6 and 7. In terms of the number size, the messages that I determined to contain small numbers referred to a 350% increase in cost, 1,324 hospital beds, 31 MRI scans, 400 new teachers and \$15 million in reference to the cost of a spinal cord injury. Each of these numbers was small in the sense that I expected the numbers would be easy for a viewer to relate to. The largest of the numbers, 15 million, was quite large but can be thought of in terms that one can relate to. For example, \$15 million dollars could buy 40 houses or nearly an entire block of houses in Edmonton.

The numbers that I classified as large were difficult to imagine and relate to. These numbers include \$600 million, \$1.6 billion and \$3 billion. I expected that these large numbers would not be as effective in creating a response from the viewers.

These first three pairs of variables helped to explore the question of sensitivity as it pertains to the style of written messages communicating the cost of traffic collisions.

5.1.2 Variable pairs (4-5) in the design style chart to help select images

The final two pair of variables related to the images used in the messages. Variable pair 4 compared the effectiveness of using a highly illustrative image that denotes

the written message, such as in messages 2, 3, 4, 5 and 8. (Fig. 1) In comparison, messages 1, 6 and 7 used a connotative image that only indirectly relates to the text. I expected the participants would indicate a preference for images directly related to the text. I expected to observe their response through a consensus that indicated their preferred style of image. This pair of variables helped to select images to evaluate whether there is a type of content that is most effective in eliciting a response.

Variable pair 5 was used to evaluate the participants' preference for the inclusion of an image of people as seen in messages 3, 4, 5 and 7. I expected that a general theme would emerge indicating a preference for the inclusion of people in the messages. I did not have a strong assumption regarding this pair of variables so I chose to create four of the messages without a person in the image to allow for evaluation of more images containing no people. This final pair of variables helped me to select images to evaluate the question of what type of content is most effective in eliciting a response.

5.2 The written content of the messages

Once I created my design style chart with variable pairs to help select written message styles, I began to select specific numbers that dealt with the cost of traffic collisions to be used in the messages. I selected numbers that I thought were dramatic due to their large size, such as the estimated overall cost of traffic collisions in Alberta each year. I also selected smaller, more personal numbers that dealt with the cost related to a single collision or injury. Other numbers that fell between the two extremes were also selected, such as the overall cost to healthcare every year or the total cost of non-injury collisions in a given year.

I then referred to my style chart to help select numbers for comparison. I used numbers from healthcare and education that would help to illustrate the collision related costs. In one case, the cost of education from kindergarten to grade 12 in a single year was similar to the cost of traffic collisions over a year. Other messages were not as easy to compare. For one message, I wanted to compare the cost of traffic collisions to the cost of hospital beds. In exploring the various numbers available to me, I believed that reducing the number of injury collisions by 20%, compared to the cost of 1,324 hospital beds, was an easy-to-imagine comparison. I determined that a 20% reduction in collisions was a reachable goal based on my research of other jurisdictions.

I developed the other six messages in a similar way, with help from the design style chart. I was not concerned with maintaining an equal balance between two variables that were in any particular pair. For instance, I expected that the comparatively large numbers would not be as easy to comprehend as the smaller numbers, so I only used three large numbers versus five smaller numbers in the messages. This choice allowed me to evaluate more numbers within the small range.

I am not a professional writer but in the context of this study, I was responsible for writing the messages. Each message was written in a direct and factual tone to avoid comments that could relate to the written style versus the content of the message.

In retrospect, I believe that it would have been useful to test the messages informally among a small group of people prior to designing the posters. This process could have helped to identify possible areas of confusion in the written messages.

5.3 The visual presentation of the messages

Messages in the form of posters were designed for evaluation by participants in the focus group sessions. Two sets were created with the first set containing the text-only posters, while the second set contained image-inclusive posters. The posters were 40.5 cm by 28 cm in size and were mounted on foam core board. I chose this format for the posters for two reasons. First, the posters were large enough to view from across the table in a focus group setting. Second, the posters were small enough to comfortably hold, pass around and read on an individual basis. The mounting board was also important for handling and analyzing the posters with ease. All of the posters were designed using a horizontal orientation.

5.3.1 Design of the text-only posters

To focus the participants on the content of the written message I used black type on a white background. (Fig. 2) I selected a serif typeface, 38 pt. Adobe Caslon Semi-bold with 38/57 pt. leading, that I determined would be easy to read and appear factual. I selected a type size that I determined would be legible from across the table in a focus group setting as well as comfortable to read on an individual basis when it was held in one's hand. I tested the type style and size by printing early versions of the posters and evaluating them from different viewing distances. A grid was used to help place the text in the approximate centre of the poster while maintaining left-aligned lines of text.

I determined that a visual identity could help tie the posters together in a set. The visual identity also served as a message in itself. I used the black and red colours from the identity as the primary colours in the design system. I chose the colour red for the dollar sign in the identity, rather than the customary green, to emphasize the urgency of the matter and the injury aspect of collisions that was used in some of the cost messages. I added the graphic identity to the bottom, right-hand corner of the text-only posters to help balance the design with the left justified text. A red border was also added to help frame the message and to connect visually with the red dollar sign in the identity.

5.3.2 Design of the image-inclusive posters

Once I had completed the text-only posters, I began to create the design system for the image-inclusive posters. (Fig. 3) Initially, I created a grid system that would help me to place my text and images. I wanted all of these posters to follow a similar layout and visual system to focus attention on the text message, selected image and

Fig. 2: Posters with text-only messages

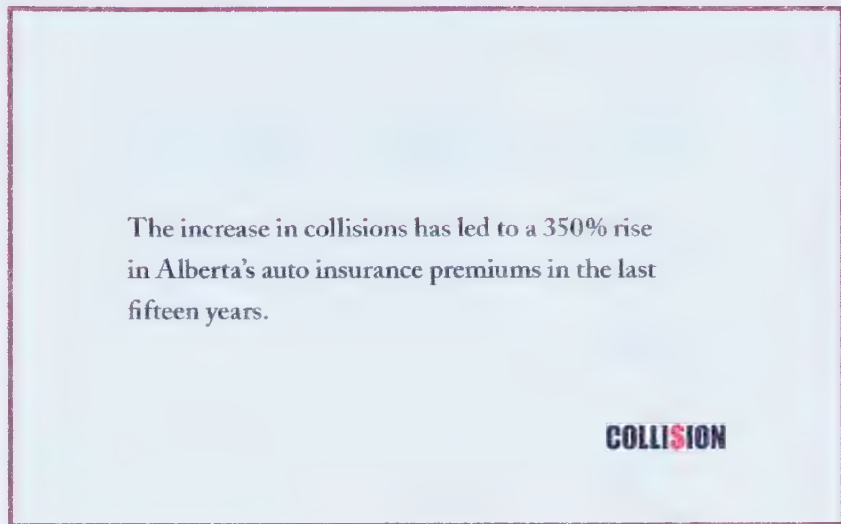


Figure 2, message 1

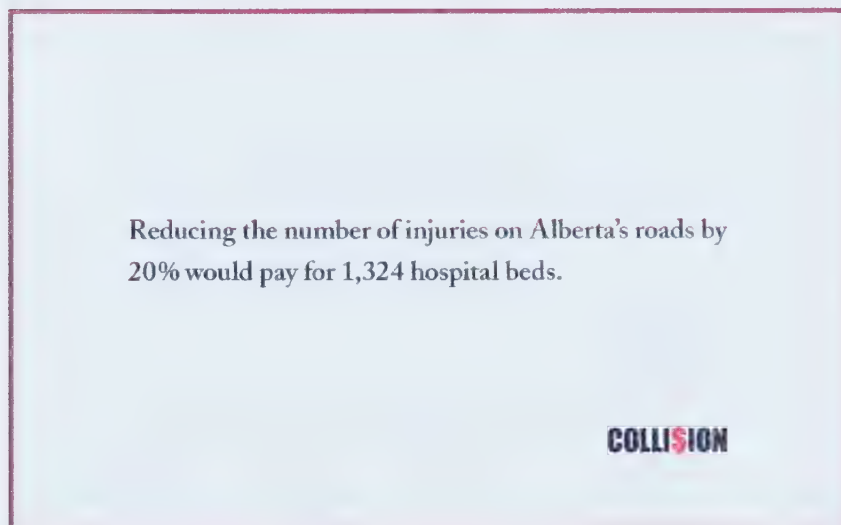


Figure 2, message 2

A single injury due to a traffic collision costs as much to treat as thirty-one MRI scans.

COLLI\$ION

Figure 2, message 3

Traffic collisions cost Albertans \$3 billion per year, nearly matching the funding that grades K - 12 receive for education.

COLLI\$ION

Figure 2, message 4

Reducing the number of injuries on Alberta's roads
by 15% would pay for 400 new teachers.

COLLISION

Figure 2, message 5

Non-injury collisions cost Albertans nearly
\$600 million per year.

COLLISION

Figure 2, message 6

Approximately 1.6 billion dollars are spent in Alberta every year in health care alone because of traffic injuries.

COLLI\$ION

Figure 2, message 7

\$15 million
The direct health care cost for a single spinal cord injury over a patient's lifetime.

COLLI\$ION

Figure 2, message 8

Fig. 3: Posters with image-inclusive messages

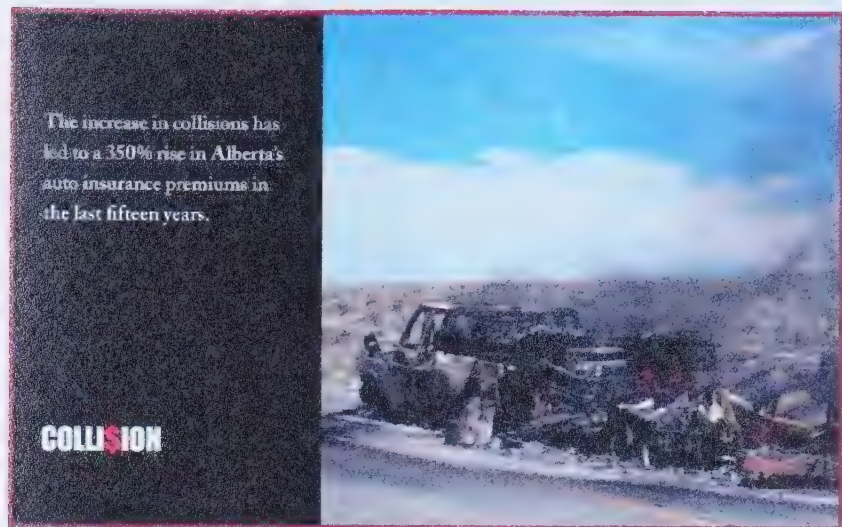


Figure 3, message 1

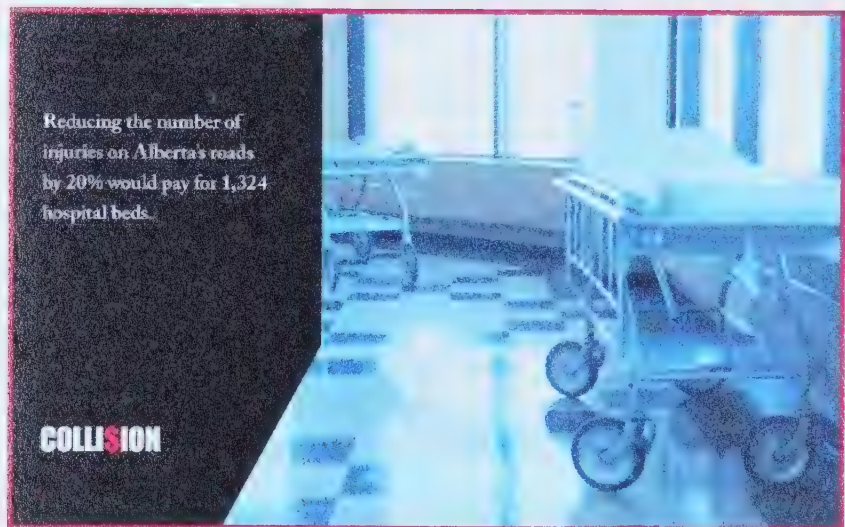


Figure 3, message 2

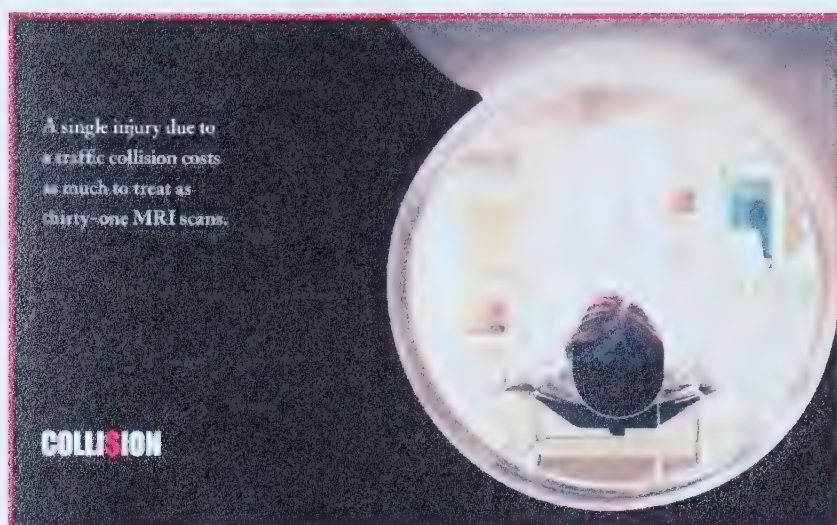


Figure 3, message 3



Figure 3, message 4

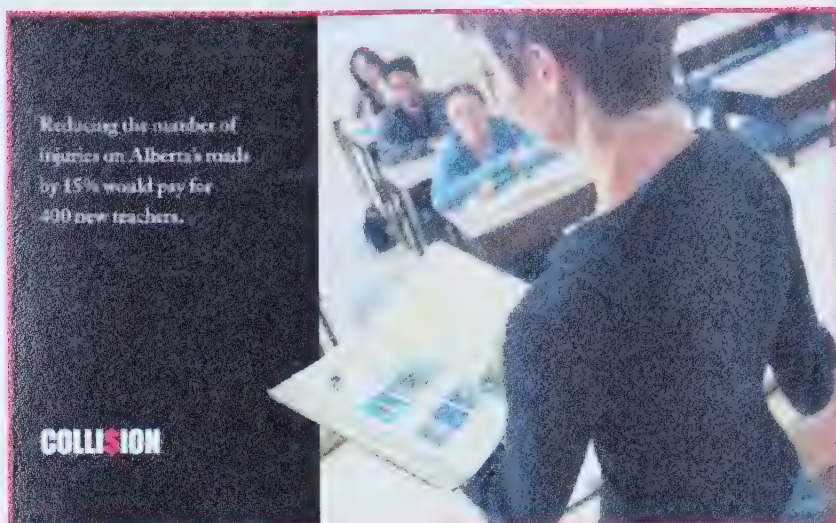


Figure 3, message 5

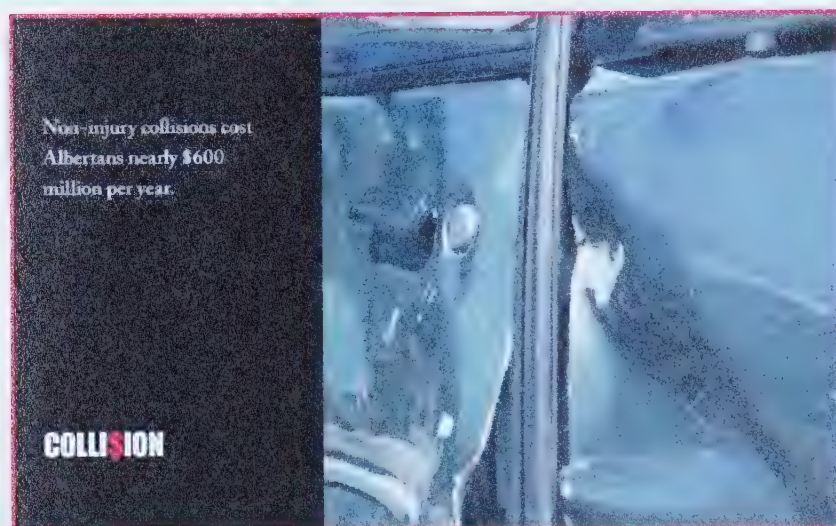


Figure 3, message 6

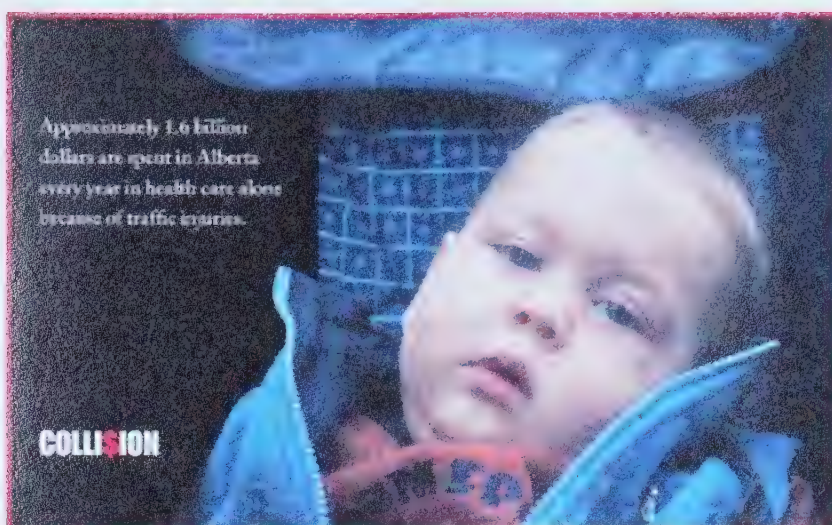


Figure 3, message 7

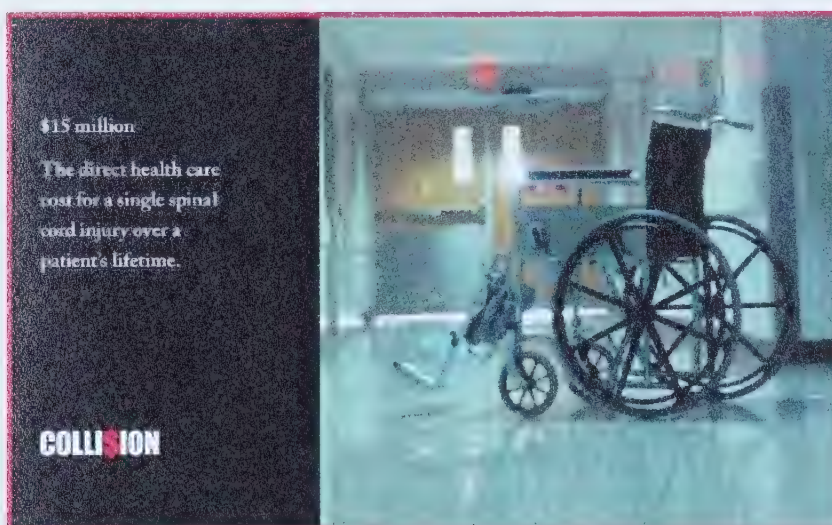


Figure 3, message 8

the interaction between the two, rather than on preferred layout or organization. Although comments related to layout would be useful, I wanted to focus on exploring issues directly related to my research questions.

I did not want the image to overwhelm the text, as I was seeking to create a balance between the text and image so participants would evaluate both elements. I also wanted to create a layout that would allow for messages of different lengths, as well as a wide variety of image content and style, while maintaining a similar balance and feel to the entire set of image-inclusive posters. I placed the text in the top left-hand corner of the poster against a background of a solid colour, rather than placing the text directly on the image to improve legibility and to place a greater emphasis on the text. The same serif typeface, Adobe Caslon Semi-bold was used as in the text-only posters, but I reversed the type and placed it on a black background to increase the urgency of the message. The type size of 28 pt. was smaller than that of the text-only poster to allow for ample room for the addition of an image. I used ample leading of 28/42 pt. to improve the legibility of the text and tested the type size to ensure legibility when viewed in a focus group setting.

I used the grid to create a black rectangle that covered the left third of each poster. The right two-thirds of each poster was reserved for the placement of an image. I added a red border of the identical width to the border of the each text-only poster to each of the image-inclusive posters. A reverse version of the identity was also created and added below the text to increase the focus on the text side of each poster.

5.3.3 Selecting images for the image-inclusive posters

The next step in the design of the image-inclusive posters was the selection of images to pair with each of the written messages. I used the last pair of variables in the design style chart to help select images. (Fig. 1) The first variable compared the effectiveness of using a highly illustrative image to denote the written message. This pair of variables was intended to explore the question of whether there is a type of style that makes an image more effective in communicating the message. The final pair of variables was used to evaluate the participants' preference for an image that featured people. This pair of variables was used to provide insight into the type of image content that might be most effective in eliciting a response.

To effectively select images that were appropriate for the topic and would satisfy the variables established in the design style chart, I searched through an extensive library of royalty-free, stock photography that offered over 100,000 images. (photos.com) This provided me with a variety of photographs to choose from for each message, and enabled me to use copyright-free images that would be difficult to stage for a photo-shoot.

The selection of images within the narrow elements that I identified for each poster did pose some problems. There were relatively few images to choose from with a highly specific set of criteria so it was difficult to find images that were exactly what I was seeking. As with the clarity of text, I expect that some informal testing with images may have been useful in identifying issues that appeared in the focus group sessions.

I felt that it was important to select an image of similar quality for each message. My criteria for a high-quality image included an adequate resolution for printing at 40.5 cm by 28 cm without containing artifacts or pixelation. The image needed to be sharp and clear with a good tonal range and accurate colour. Finally, the image needed to focus on an appropriate subject with an interesting composition. My ability to judge the criteria for the quality of each image is based on my training and experience.

5.3.4 Integrating images for the image-inclusive posters

Once I had selected an image for each written message, I moved from the formal design process, such as a strict reliance on a grid, to a more intuitive approach. I cropped each image to focus on key elements while placing the image in the right-hand third of the poster. I explored the figure/ground relationship between the black bar on the left third of the poster and elements in some of the images. In some cases, I overlapped part of the image with black where I determined that it was visually engaging and would lead the viewer into the poster, as seen in Figure 3, messages 2 and 3. Conversely, I overlapped elements of the image over the black box on the left-hand third of the poster in Figure 3, messages 2, 4, 5 and 7. I did not change the figure/ground relationship in Figure 3, messages 1, 6 and 8 as it was not visually appropriate for those images. I used this figure/ground technique in a number of instances to create visually engaging posters and to provide some variety across the set without drastically altering the visual system. This design process reflected the balance between a strict visual system, to focus comments on the content of the posters, and the need to design posters that were engaging, visually interesting and dramatic.

6. EVALUATION

Focus groups were conducted to evaluate the messages with a qualitative approach, as this is a case where “mathematical formulas are not useful when human responses are at stake.” (Frascara, 1997, 33) In the context of this study, I was not targeting high-risk drivers with the intention of changing their behaviour; rather I was seeking insight into the response of the general public to the messages that communicate the cost of traffic collisions. As the messages did not address driving behaviour, I could not predict how participants would respond based on demographics. I chose not to collect demographic information from the participants, as the number of participants was not a large enough sample to be statistically valid, nor was I seeking generalizable data. The participants offered a diverse population that allowed me to observe differing opinions. At times, the opinions may have been partially based on age or sex, but at other times it appeared that participants of different ages, background or experience would agree on a single issue that may not show up in a statistical snapshot. Although my approach did not require statistical data, a survey could potentially be useful to analyze trends over a longer period of time with a larger number of participants. It is possible that statistical data may also prove useful to policy makers or funding agencies.

Zoe Strickler outlined three reasons for using focus groups as a useful tactic in exploring the response to visual messages. First, "people are willing to divulge more sensitive personal information in the security of a group of strangers than they are in a one-on-one conversation with an interviewer," second, "the dynamic of a group discussion sparks connections in the minds of the participants that might not otherwise come out," and finally, "because attitudes and opinions are naturally formed during social interaction, the group discussion provides an opportunity to observe actual processes of attitude formation." (qtd. in Frascara, 1997, 47)

6.1 The process for conducting two focus groups

Two focus groups were comprised of a total of 27 adult members of the general public. One focus group consisted of 14 adults while the other had 13 attend. Each participant was paid \$30 for their participation. An experienced moderator managed each focus group session, which offered an excellent opportunity to learn how to moderate a focus group by seeing the process first hand. It also provided an unexpected benefit of allowing me to carefully observe and document the participants' reactions.

In addition to my notes, another graduate student acted as a research assistant and observed the sessions and took additional written notes. Audio from each focus group was recorded on digital mini-disc and the final audio recordings were transcribed to a written form for analysis. In the focus group sessions I recorded audio rather than video so that the participants could feel anonymous.

At the beginning of the focus group sessions, the moderator asked some preliminary questions to introduce the topic and put the participants at ease. These initial questions included, "tell us what you like most about driving?" and "what do you think are the most common causes for injury collision in Alberta?" (Appendix 10) These questions allowed me to explore the participants' initial thoughts on traffic collisions offering insight into any changes in their attitudes during the sessions. This insight was very useful. Later in the sessions, I observed what seemed to be a general shift in the attitude of many participants when they were told of the success stories of some jurisdictions that had significantly reduced their number of traffic collisions.

The eight messages were initially presented as text-only posters to the focus groups. Each text message was discussed among the participants. The moderator encouraged participation and discussion by all of the participants while maintaining a comfortable and non-judgmental environment. Each message was discussed in with the group to gain insight into possible strengths and weaknesses.

Later in the sessions, the image-inclusive messages were presented. I watched for indications to whether the integration of an image was preferred. The style and content of each image was discussed in relation to the written content that accompanied each image. I referred to the research questions and variables in the design style chart to help me focus on areas of discussion that involved those questions. I watched for body language that seemed to reflect a participant's comments and observed the body language of other participants that indicated

agreement or disagreement with comments in the discussion. I took note of particularly strong reactions and indications of general consensus. My observations and the notes that I took along with the notes provided from the other observer provided a starting point in my analysis of the transcripts.

6.2 Analyzing the transcripts

Initially, I read through the entire set of transcripts several times to familiarize myself with the content. Next, I paid particular attention to general themes and areas of consensus among the participants that I first observed during the sessions. I used a different colour of highlighter for each comment that dealt with a particular theme. I also wrote notes in the margins to help me clarify my observations. In addition to the themes that I noted in the sessions, I highlighted comments that I found useful or interesting in the transcripts so that I could seek verification of those themes in other areas of the transcript for the same session or within the transcript for the other session. In particular, themes that presented themselves in both focus groups were of interest. The following text outlines a number of themes which emerged, that led to the development of a series of suggestions that could be the focus of further research.

6.3 Discussion of themes

6.3.1 The response of adults to messages that communicate the monetary costs of traffic collisions in Alberta

It appears that adults respond favourably to messages that communicate the monetary cost of traffic collisions in Alberta. During the focus group sessions, I observed participants that were actively engaged in the discussion and appeared energized by the success stories of other jurisdictions. Through the emotional comments and animated discussion of the participants, it appears that communicating the monetary cost of traffic collisions may be an effective tactic for empowering the public.

6.3.2 The style of written arguments to which adults are most sensitive

I observed themes that indicated participants were sensitive to particular styles of written arguments that elicited the strongest response and the least confusion. In exploring the style of written messages, I focused on comments that dealt with variables in my design style chart.

Variable pair 1

First, the use of a comparison in which a figure related to the cost of collisions was compared to a cost of a commonly discussed service, such as education or healthcare, appeared to be more effective in generating a response and discussion among the participants. I observed the participants' reactions to comments from fellow participants and took note of comments and body language that indicated agreement or disagreement with those comments. I also paid close attention to

discussion that directly addressed any of the variables from the design style chart, both in agreement or disagreement. For example, one participant used a comparison in his own argument stating "Alberta got up in arms over the 1 billion dollars that was spent on the gun registry and it doesn't work... if we're going to waste 1.6 billion or 3 billion dollars on accidents we, I say Albertans as a whole... we're awfully angry about gun registry but that's a lot less money in the whole scheme of things." (Appendix 1, 2-6) One particularly strong message that dealt with comparing the cost of education to collisions led to a lengthy discussion. One participant said that the message "really resonates because...no one can really say that education isn't really necessary...whereas traffic injuries seem so needless, senseless, such a waste." (Appendix 1, 2-9) Another participant commented that a comparison helps to put the figures "into perspective." (Appendix 1, 2-10) The moderator asked "do you find you react more when there is a comparison with something that is relevant to you? Or do you prefer the numbers with the money just isolated?" A participant said that a comparison style of argument is preferred, particularly when it relates to a topic of "general experience, like the K to 12 [message]" (Appendix 1, 2-14) In comparison, one of the messages that did not contain a comparison was referred to as a "faceless statistic" that didn't "really have any impact." (Appendix 1, 2-30)

It appears that comparisons may have helped participants to visualize particularly large costs associated with traffic collisions. Overall, the messages that used a comparison in their written structure prompted the most discussion and greatest emotional response.

Suggestion: Use a comparison in the content of the message to something that is familiar and significant to the public addressed.

Variable pair 2

The second variable pair in the design style chart dealt with comparing messages that contained a figure as a percentage versus messages that did not. One participant indicated a preference for a figure that was not presented as a percentage but there seemed to be little discussion on the matter overall. (Appendix 1, 2-12) Another participant preferred a message that contained a percentage saying that the message "really resonated." (Appendix 1, 2-14) It appears that the effectiveness of a percentage in a message may be inconclusive in the context of this study. No strong opinion presented itself in the focus groups regarding the use of percentages.

Variable pair 3

The final style of written argument to which participants seemed sensitive related to the size of numbers in the text. The costs of collisions were communicated in both small, personal and easy to comprehend numbers, such as a figure of the cost of 31 MRI scans, up to numbers in the billions that are difficult to imagine. Although I was concerned that the enormous numbers may simply be too large to have any real impact, I found that many of the participants reacted very strongly to those messages. For example, the message with the largest number, the comparison of 3 billion dollars to the cost of K-12 education, seemed to elicit the strongest response in both focus groups. One participant explained that he liked the message because

it “gives you a big number and then it also compares with something that is concrete.” (Appendix 1, 2-10) Although there seemed to be a number of comments in favour of using larger numbers, that was not necessarily the consensus. In reference to the message “non injury collisions cost Albertans nearly 600 million per year,” one participant stated that the number was “too big... I can’t really wrap my mind around it.” (Appendix 1, 2-15)

Suggestion: Use large numbers as they may garner an equal response to small figures as long as they are compared with something that relates personally to the viewer.

6.3.3 The usefulness of integrating an image

It appeared that using an image in the message heightened the emotional reaction of the participants to many of the posters. In addition to creating an emotional reaction, it appeared that, in some cases, images helped to communicate messages and reduce confusion. Participants seemed to be more engaged with the posters that included images.

Suggestion: Use images to both increase emotional engagement and to improve the communication of the message.

6.3.4 The style that makes an image most effective in communicating a message

Images that were directly related to the text appeared to improve the communication of the text resulting in a more effective message. The selection of imagery ranged from the literal, such as a teacher in a classroom with a message specifically discussing teachers, to the nearly abstract image of a close up view of a dented car door. Messages 2, 3, 4, 5 and 8 contained an image that was directly related to the text in the message. (Fig. 3)

Images helped to explain the content, such as the case where one participant stated that “now I actually know what MRI is” after seeing the image of one in a message. (Appendix 1, 2-35). One of the messages contained an image of a baby with unrelated text prompting a participant to ask “why is there a baby in the picture”. (Appendix 1, 2-16)

In some instances, images appeared to be confusing if they were not direct and accurate. One participant commented that “...I see those hospital beds and... it doesn’t seem like much [money]” as opposed to showing the “entire hospital room with all the equipment” which would portray the message more accurately. (Appendix 1, 2-36)

Suggestion: Use an image that is clear and documents the content of the text.

6.3.5 The type of content in an image that is most effective in eliciting a response

In general, images appeared to be effective in eliciting a response, particularly when the subject of the image was emotionally engaging and featured people. I used the

design style chart to select images to explore the effectiveness of images for eliciting a response. I also referred to the design style chart to help identify themes during the focus groups.

Variable pair 4

The fourth pair of variables in the design style chart explored the inclusion of images that were directly related to the text versus images that were not. (Fig. 1) It appeared that images that were not directly related to the text were not as effective in eliciting a response. When a nearly abstract image of a dented car door was used in message 6 (Fig. 3) one participant commented that the image "has the least impact out of all of them." (Appendix 1, 2-35) Overall, participants indicated that the unrelated image was not very effective. (Appendix 1, 2-16, 2-17)

Suggestion: Use an image that is directly related to the text.

Variable pair 5

The fifth pair of variables in the design style chart dealt with the inclusion of people in the picture, as seen in messages 3, 4, 5 and 7. (Fig. 3) Although some images that did not contain people at times received positive feedback, it did appear that including people in the images was more effective. For example, one participant said that the image of a person helps her to see the "human side" of a collision. (Appendix 1, 2-38) Of particular note, the same participant said that the image of the baby in message 7 (Fig. 3) "just about brings tears to [her] eyes" even though the image did not directly relate to the text prompting confusion among other participants. (Appendix 1, 2-38) In reference to the picture of the young girl in message 4 (Fig. 3) a participant noted that the photo "provides a face" to the message. (Appendix 1, 2-36)

Suggestion: Use an image that includes people.

6.4 Other observed themes

6.4.1 Message clarity

Through my observation of the focus groups, which included watching body language that suggested confusion, I found that it was essential to write messages that were concise and extremely clear. This suggestion may seem self-evident, but messages I thought were very clear could cause confusion in unexpected ways. Any message that left room for confusion could cause particular annoyance. For example, message 2 was intended to relate the cost of collisions to a number of hospital beds, but one participant said that it was hard to "visualize" the relation of the hospital beds to cost, while another did not understand if the term hospital bed dealt with "the physical bed" or a "space for one night for one patient." (Appendix 1, 2-10) Although the message was intended to communicate the total cost of a hospital bed, including staff and the room in the hospital, a number of participants appeared confused. They were concerned that the cost was quite high for a bed as they associated the message with the physical piece of furniture. (Appendix 1, 2-10)

Although I believed that the messages I wrote were very clear, due to the confusion that some of the messages created, I suggest using informal, preliminary user testing to uncover unexpected results prior to developing prototypes.

Suggestion: Write text messages that are clear and concise.

6.4.2 Writing a relevant message

During the focus group sessions, I found that often a single message that was dismissed by some would find a number of champions within the group. Of particular note, politically-charged messages that dealt with the local issues of education and healthcare funding fell into this category. One participant stated that as a student, he understood “the importance of the student to teacher ratio.” (Appendix 1, 2-7)

In some cases, participants indicated that they could not relate to particular messages. One participant said that the non-injury collisions in message 6 (Fig. 3) did not relate to him because he was “not paying for someone else’s fenders to get fixed” although he did agree that he was partially responsible for paying healthcare costs. (Appendix 1, 2-13) Another participant believed that if money “actually came out of their pocket” people would recognize that driving is a “privilege.” (Appendix 1, 2-26) One of the most direct statements was simply “if you don’t need to get an MRI you can’t relate at all.” (Appendix 1, 2-13)

It appeared that writing messages that relate to local issues could be an effective of generating discussion, such as in the poster related to hospital beds. The content of that poster was dismissed by some of the participants as ineffective. In contrast, one participant stated that hospital beds were a central issue in the rural area where she lived and that, for her, the message hit home. (Appendix 1, 2-11) This observation echoes the WHO’s recommendation of highly targeted, local initiatives.

Suggestion: Viewers should be able to personally relate to the content of a message.

6.4.3 Using emotional appeal

Although it has been suggested that the using emotional appeal in messages could be effective in eliciting a response, I wanted to explore the use of both rational and emotional approaches in this study. (Delaney, 2004, 60) My approach did not intend to alter driver behaviour, as I was communicating the monetary cost of traffic collisions. In this case, I thought that a rational approach might be worth exploring in comparison to an emotional approach. However, I found that the use of emotional appeal may improve the response of viewers to a message that communicated the monetary cost of traffic collisions. For instance, one participant said that the image of the baby in message 7 (Fig. 3) “just about brings tears to [her] eyes” indicating an emotional response to the image. (Appendix 1, 2-38) Another participant indicated that the use of fear in a message could be effective. He noted that he is concerned about a collision that “could leave [him] permanently injured.” (Appendix 1, 2-14)

Other indications of the strength of an emotional approach were also observed. For instance, the message of an injury collision seemed to be more effective than non-

injury collisions prompting one participant to say that non-injury collisions were “not very dramatic.” (Appendix 1, 2-13) Without an injury detailed in the message, a participant said that he was “not really as engaged with [the message].” (Appendix 1, 2-13) In another instance, a participant discussed a highly graphic campaign from “around ten years ago” that he believed had a greater impact on him than “a lot of ad campaigns” from today. (Appendix 1, 2-18) Another participant commented on the highly graphic campaign, stating that the “horrific and gory” images made her “think twice about speeding.” (Appendix 1, 2-29)

Suggestion: Use emotional appeal in images and text.

6.5 Themes that could lead to future research

Two themes emerged that could be the focus of further research. First, connecting the campaign with a strong visual identity generated some discussion.

Second, it appeared that the participants were more engaged in the topic of traffic safety once they knew that the number of collisions had been successfully addressed in other jurisdictions.

6.5.1 Including a graphic message in the form of a visual identity

The participants may have been influenced by the visual identity, signifying that an official organization was responsible for the messages. A participant in the first focus group commented on the overall uniformity of the design and the “Collision” logo that tied the set together saying that the “collision logo” is really “direct.” (Appendix 1, 2-13) This comment was out of context of the conversation and not related to a particular question. A similar comment arose in the second focus group as well when a participant stated “I like that logo the way it is... [the logo] looks like [it belongs to] a big organization.” (Appendix 1, 2-39) Not only is the logo a visual identification of an organization responsible for the messages but the graphic is also a clear visual message on its own. The comment may indicate the importance of a credible organization backing the message. Would the messages be as effective without the logo of an organization? This question could benefit from further research.

It appears that a visual system that connects a set of posters with a strong visual identity may increase the credibility of the organization producing the messages among the viewers thus increasing the credibility of the messages.

Could a visual identity contribute to the credibility of the messages? In addition, the visual identity was a message on its own. Could the identity be a successful message when viewed by itself or paired with an image?

Suggestion: Connect the campaign with a strong visual identity that represents an organization to increase the credibility of the message and use the identity as a message in its own right.

6.5.2 Discussing success of other jurisdictions in reducing the number of traffic collisions

An interesting theme emerged in both focus group sessions. For example, when one group was discussing collisions in a general sense, one participant said "...people just think 'well it's an accident what are you going to do?'" (Appendix 1, 2-26) Another participant stated that "there's this kind of idea that accidents just happen and it doesn't matter how much they cost because they're going to happen anyway." (Appendix 1, 2-5) One participant asked "...what would I do to reduce the number of traffic collisions because everybody thinks that they're a good driver and nothing's going to happen to them." (Appendix 1, 2-19)

In the first focus group, a participant asked whether or not anyone had been successful in reducing the number of collisions in similar numbers to those contained in the messages. The moderator replied that many campaigns, most notably in Australia and Western Europe, had reached and far exceeded the targets presented on the posters. The success of other jurisdictions was similarly discussed in the second focus group.

The moderator briefly described the 30-50% drop in collisions in the State of Victoria. This example led to an animated discussion about the possibility of reducing the number of collisions in Alberta and how it was achieved in other areas. It appeared that the participants become more engaged in the discussion process once they knew of the success of other areas.

The participants may have felt empowered by the knowledge that collisions can be reduced through investment in enforcement, road design and communications. Would a campaign be more effective if some of the messages communicated success stories or other jurisdictions?

Suggestion: Relate the success of other areas and campaigns.

6.5.3 The opportunity to conduct quantitative research to explore communicating the cost of traffic collisions to the general public

Although a qualitative approach was used to explore the responses to the messages in this study, the suggestions were a result of observed themes. Further insight could be gained with a quantitative approach. This approach could further explore the tactic and possibly confirm the suggestions that resulted from this study. Funding agencies that require documentation of the approach could find the quantitative data useful. A quantitative approach could help to verify the themes that were observed in this study by using a greater number of focus groups in addition to personal interviews, questionnaires and surveys that collect population data.

7. Conclusion

7.1 Summary

This study explored Frascara's proposed alternative tactic for addressing traffic safety through communication design. The study focuses on communicating the monetary cost of traffic collisions to the general public to create pressure on policy makers with the goal of increased investment in traffic safety initiatives. Research questions focused on how adults respond to text-only and image-inclusive messages that communicate the monetary costs of traffic collisions in Alberta, in relation to visual style and content.

Overall, the members of the focus groups tended to respond favourably to the messages documenting the cost of traffic collisions in Alberta.

It appeared that participants reacted strongly to particular styles of written arguments that originated in my style chart. First, a number was used to report the cost of collisions in monetary terms. The message appeared to be more effective in generating a response and discussion among the participants when the cost was, in a second case, compared to the cost of a commonly discussed service, such as education or healthcare.

The use of a comparison in which a figure related to the cost of collisions was compared to a cost of a commonly discussed service, such as education or healthcare, appeared to be more effective in generating a response and discussion among the participants. Overall, the messages that used a comparison in their written structure prompted much discussion and the greatest emotional response.

The second variable pair in the design style chart dealt with comparing messages that contained a figure as a percentage versus messages that did not. I did not observe any comments that indicate a strong preference among either of the focus groups.

The final style of written argument to which the participants appeared to strongly react related to the size of numbers in the text. The costs of collisions were communicated in both small and easy-to-comprehend numbers, as well as large numbers up to the billions, that were difficult to imagine. I was concerned that the enormous numbers may simply be too large to have any real impact, however, I found that many of the participants reacted very strongly to those messages. Although there appeared to be a number of comments in favour of using larger numbers, that was not necessarily the consensus among the participants.

It appeared that using an image in the message elicited a strong response among the participants, particularly when the subject of the image was emotionally engaging and featured people. The selection of imagery ranged from the literal, to images that were nearly abstract. Overall, it appeared that the unrelated image was not very effective.

Finally, images directly related to the text appeared to improve the clarity of the text resulting in a more effective message.

Several other themes were observed during the sessions. Although this suggestion may seem self-evident, it was essential to write messages that were concise and extremely clear. Through the course of the focus groups I found that messages I thought were clear, could cause confusion in unexpected ways. Second, messages should relate personally to the viewer. Often, a message that was dismissed by some participants would prompt a strong reaction from others within the group. Finally, the use of emotional appeal appeared to improve the response of viewers to a message.

7.2 Limitations

There are several limitations to this study. This study is based on a tactic of targeting the general public with messages of the cost of traffic collisions to create discontent generating pressure on local government. As this new approach differed from targeting drivers to change their behaviour, the study explored a broad range of issues in the hope of gaining insight into the response of the general public.

The messages were evaluated by a small number of participants following a qualitative approach. Demographic information was not collected, nor was the limited number of participants statistically valid.

Questions and comments from the moderator, particularly those related to success stories of other jurisdictions, could have affected responses to the posters.

The messages were limited to text and image only, rather than including other media, such as audio, video or interactive media. In both focus groups, the text-only messages were presented in the same order, which may provide different reactions than if they were presented in a random order. In addition, the results were based on observation and analysis of themes in the transcripts which is insightful but limited in scope.

The limited variety of images that I had at my disposal, as well as my final selection of images based on my own set of criteria, could have led to some discussion by the focus groups that was not directly related to the style or content of the image but may have been a result of personal preference. The fact that I wrote the messages is also a limitation as I am not a professional writer.

7.3 Opportunities for further study

Many opportunities exist to further explore the approach of communicating the monetary cost of traffic collisions to empower the public. Further insight into the tactic may help to confirm whether the tactic is an effective approach to empower the public, as well as to fine-tune the messages to make them stronger in eliciting a response.

A qualitative approach was used in this study to explore the response to the messages without the necessity of generalizable results. However, a quantitative approach may be useful for insight into the tactic, as well as providing funding agencies with documented results should they be required. A quantitative approach could include a larger group of participants, as well as other approaches such as individual interviews

and questionnaires. A qualitative study could provide population data and help to help verify themes.

Two main themes emerged that could be the focus of further research. First, connecting the campaign with a strong visual identity generated some discussion. The participants may have been influenced by the appearance of an official organization being responsible for the messages. Could a visual identity contribute to the credibility of the messages? In addition, the visual identity also functioned as a message itself. It may be worthwhile to explore the response of a target group to the identity by itself or possibly with the integration of the image, without the addition of text.

Second, it appeared that the participants were more engaged in the topic once they knew that the situation had been successfully addressed in other jurisdictions. The participants may have felt empowered by the knowledge that collisions can be reduced through investment in enforcement, road design and communications. Would a campaign be more effective if some of the messages communicated success stories or other jurisdictions?

In addition to the themes that I observed in the focus group sessions, it may be useful to test the tactic of communicating the cost of traffic collisions to empower the public through other mediums. Collaboration with other experts could allow for an integrated approach, such as including newspaper, magazine and online articles, television and online video messages, radio, podcasts, blogs, online forums, posters, billboards and art installations.

7.4 Final comments

Visual communication design can play a key role in effectively addressing social problems. By addressing groups of people that are statistically at a higher risk due to their behaviour, the general public and policy makers, visual communication design can be vital to inform and educate people. Visual communication design can also empower people by informing them of successful initiatives that have reduced the ramifications of serious social issues. Information may motivate people to take action by lobbying policy makers, discussing social issues with their peers and supporting organizations that seek to address important social issues.

References

- Alberta Transportation and Utilities Motor Transport Services. *Societal Cost of Collisions for Alberta*. Transportation Safety Branch, A Discussion Paper, (1995).
- Albert, Terry, and Eden Cloutier. *The Economic Burden of Unintentional Injury in Alberta*. SMARTRISK, (2002), ISBN 1-894828-32-1.
- Anielski Management Inc. *Alberta Traffic Safety Progress Report: Key Indicators and Trends*. Alberta Motor Association, (2004).
- Bator RJ, Cialdini RB. *The Application of Persuasive Theory to the Development of Effective Proenvironmental Public Service Announcements*. Journal of Social (2000).
- Delaney, Amanda, et al. *Review of Mass Media Campaigns in Road Safety*. Monash University Accident Research Centre. (2004).
- Frascara, Jorge. *User-Centred Graphic Design: Mass Communications and Social Change*. Taylor & Francis, (1997).
- Government of Alberta. *Facts on Education Funding in Alberta*. Alberta Learning, September 15, 2004 <<http://www.learning.gov.ab.ca>>.
- Government of Alberta. *Healthcare is Everyone's Top Concern*. Health and Wellness, Alberta. March 25, 2004 <<http://www.health.gov.ab.ca/about/about.html>>.
- Jacobs, Phillip, Doug Lier and Donald Schopflocher. Long Term Medical Costs of Motor Vehicle Casualties in Alberta (1999): A Population-Based, Incidence Approach. *Accident Analysis and Prevention* 36 (2004), 1099-1103.
- Jacobs, Phillip, and Doug Lier. *The Provincial Health Care Costs of Motor Vehicle Accidents for Third Party Liability in Alberta*. Working Paper 03-05, Legal Deposit 2000, National Library of Canada, ISSN 1481-3823.
- Jacobson, Mitchell, et al. *Estimating the Cost of Collisions using Insurance Claims Data: An Exploratory Study*. Proceedings of the Canadian Multidisciplinary Road Safety Conference, (2004).
- McDermid, Don. *Saving Lives on Alberta Roads. Report and Recommendations for a Traffic Collision Fatality and Injury Reduction Strategy* (2004).
- Peden, Margie, et al. *World Report on Road Traffic Injury Prevention*. World Health Organization. (2004).
- Rick Hansen Man In Motion Foundation. *Spinal Cord Injury in Canada-Removing Disincentives to Employment*. September 15, 2004 <<http://www.rickhansen.com>>.

Bibliography

- Alberta Federation of Labour. *Submission to Alberta's Commission on Learning*. Edmonton, Alberta (2002).
- Advertising Federation of Australia. *Road Safety: the Transport Accident Commission Campaign*. Southwood Press Pty Limited, (1990), ISBN 0 9588165 4 9.
- Alberta Transportation and Utilities Motor Transport Services. *Societal Cost of Collisions for Alberta*. Transportation Safety Branch, A Discussion Paper, (1995).
- Anielski Management Inc. *Alberta Traffic Safety Progress Report: Key Indicators and Trends*. Alberta Motor Association, (2004).
- Anielski, Mark. *The Alberta GPI Accounts: Auto Crashes and Injuries. Report #12*, Pembina Institute for Appropriate Development, (2001).
- Albert, Terry, and Eden Cloutier. *The Economic Burden of Unintentional Injury in Alberta*. SMARTRISK, (2002), ISBN 1-894828-32-1.
- Bator RJ, Cialdini RB. *The Application of Persuasive Theory to the Development of Effective Proenvironmental Public Service Announcements*. Journal of Social (2000).
- Crano WD, Prislin R. *Attitudes and Persuasion*. Annu. Rev. Psychol. (2006).
- Cummings, Dr. Garnet. *Medical Costs. Tables*. Alberta Health, (2005).
- Delaney, Amanda, et al. *Review of Mass Media Campaigns in Road Safety*. Monash University Accident Research Centre. (2004).
- Francescutti, Louis. *Personal interview*. 19 January 2005.
- Frascara, Jorge. *Communications and Traffic Safety*. (2000).
- Frascara, Jorge. *Personal interview*. 27 September 2004.
- Frascara, Jorge, et al. *Traffic Safety in Alberta*. University of Alberta, (1992).
- Frascara, Jorge. *User-Centred Graphic Design: Mass Communications and Social Change*. Taylor & Francis, (1997).
- Government of Alberta. *Funding Teachers' Salaries*. Budget 2003: Making Alberta Better, September 15, 2004 <<http://www.gov.ab.ca>>.
- Government of Alberta. *Health Authority Funding Allocations*. September 15, 2004 <<http://www.gov.ab.ca>>.
- Government of Alberta. *Healthcare is Everyone's Top Concern*. Health and Wellness, Alberta. March 25, 2004 <<http://www.health.gov.ab.ca/about/about.html>>.
- Government of Alberta. *Facts on Education Funding in Alberta*. Alberta Learning, September 15, 2004 <<http://www.learning.gov.ab.ca>>.
- Government of Alberta. *News Release: McDermid Recommends Road Safety Plan and Sustainable Funding for Traffic Safety in Alberta* (2004).
- Health Canada. *Economic Burden of Illness in Canada*. Population and Public Health Branch, Policy Research Division, Strategic Policy Directorate, (1998).

Jacobs, Phillip, Doug Lier and Donald Schopflocher. *Long Term Medical Costs of Motor Vehicle Casualties in Alberta (1999): A Population-Based, Incidence Approach*. Accident Analysis and Prevention 36 (2004), 1099-1103.

Jacobs, Phillip, and Doug Lier. *The Provincial Health Care Costs of Motor Vehicle Accidents for Third Party Liability in Alberta*. Working Paper 03-05, Legal Deposit 2000, National Library of Canada, ISSN 1481-3823.

Jacobson, Mitchell, et al. *Estimating the Cost of Collisions using Insurance Claims Data: An Exploratory Study*. Proceedings of the Canadian Multidisciplinary Road Safety Conference, (2004).

McDermid, Don. *Saving Lives on Alberta Roads. Report and Recommendations for a Traffic Collision Fatality and Injury Reduction Strategy* (2004).

National Safety Council. *Accident Facts. A Nongovernmental Not-For-Profit Public Service Organization*, (1992 ed.).

Newton, Bill. Personal interview. 19 January 2005.

Peden, Margie, et al. *World Report on Road Traffic Injury Prevention*. World Health Organization. (2004).

Rick Hansen Man In Motion Foundation. *Spinal Cord Injury in Canada-Removing Disincentives to Employment*. September 15, 2004 <<http://www.rickhansen.com>>.

Rothe, Peter ed., *Driving Lessons. Exploring Systems That Make Traffic Safer*, University of Alberta Press, (2002), ISBN 0-88864-370-5.

Woodhouse, Mark. Personal interview. 27 September 2004.

Appendix 1

Focus Group Session 1

Moderator: I don't think it's indispensable to ask every one person to say something however if I notice some of you are extremely quiet I might address you personally. The first thing that I would like to know briefly is what you like most about driving.

Participant: It gets you to a place quicker.

Moderator: Yes

Participant: It's better for long distances. I don't really like driving in the city. I don't drive but I really don't like being in the city if I can avoid it.

Moderator: Any other opinions?

Participant: There's a sense of independence. Doing what you want to do.

Moderator: Yes

Participant: I think I'm a hands on person, so it's something you can operate you have control over

Moderator: Uh huh. Any other opinion?

Participant: Just the freedom, to be able to go where you want when you want.

Participant: It's easier to transport materials than taking the bus for example.

Moderator: Uh huh. Anybody else anxious to add something.

Participant: I think it is a pleasurable activity, so it's really fun. I like it.

Moderator: In what way?

Participant: Well, basically I'm from Bombay and if you can drive on Bombay roads, you can drive anywhere.

Moderator: I can just imagine that, yes.

Participant: So, it's actually difficult to drive a vehicle for me, because there are rules to follow. Like here it requires more concentration(?). It requires concentration over there. There you drive at the spur of the moment but here you have to like be so careful, you know, you have to always follow the rules because you never know when a cop is following you and will give you a ticket. But it's fun because you know the roads are much clearer and the visibility is usually good and no matter how many cars are on the road, it always looks so clean. It's fun to drive here.

Participant: I like to do a lot of hiking and camping and like getting out of the city to spend time in the nature preserves around Edmonton. It's impossible without driving. There's no buses that go to these places.

Moderator: O.K. now tell me what you dislike most about driving.

Participant: Icy roads.

Participant: Creepy drivers.

Participant: Traffic in general.

Moderator: If you had just the city for yourself, it would be perfect.

Participant: Actually, I'm tired of the long drive. I drive a lot of long distances and I don't like driving long distances anymore.

Participant: I think the inconsistency of actions of some drivers. A lot of drivers, you don't know what to expect from them.

Participant: Do other drivers know what to expect from you?

Participant: I don't like the pollution aspect of it.

Moderator: Pollution.

Participant: Ya, it accounts for about 25% or more of our emissions, I mean that's really awful.

Participant: Trying to maneuver around construction areas and you don't know where they are week to week. They differ.

Participant: Just feels cut off from the outside world, like I prefer whenever I can to cycle or bike, like I just like to feel that I'm involved in my surroundings.

Participant: Being stuck behind a student driver. Worst thing ever.

Participant: I don't know if this is appropriate, but just the sheer cost of it, insurance and stuff. I don't know if that's what you're driving at.

Moderator: At this point this is very general and not exactly the focus on the kind of campaign that we are doing. I just want to get a bit of a context of your experiences and your perceptions of driving; because in the end if we have a serious problem with injuries and nevertheless society chooses to keep on driving massively, then I want to understand better why it is that happens. It's like the problem of aids for instance you have you know sex drive is quite understandable, you know it's built in our biology. Driving cars is not built in our biology that's just sheer general curiosity about the context we are in at this point.

Participant: Well cars are simply a tool to get where we want to go so going somewhere is part of our being, I mean because why I drove long distances because like this fellow over here that you have to get somewhere where there is no other way of getting there except driving yourself.

Moderator: O.K. now, moving a little bit closer to the center of the topic, what do you think are the most common causes for injury collisions in Alberta?

Participant: Impatience.

Participant: Alcohol.

Participant: Human error.

Participant: Cockiness.

Participant: Excessive speed.

Participant: Inattention.

Participant: Ice.

Participant: Failure to yield to... sorry...

Participant: Talking on the cellphone.

Participant: Wildlife.

Participant: disobeying traffic lights, signs, etc. Oh, merging improperly too.

Participant: I think the way the roads are set up here there's a vast difference from a lot of major cities elsewhere. In my opinion actually like comparing California roads to Edmonton roads, Edmonton roads are a lot more cluttered with distracting objects.

Participant: A lot of signs. I was travelling across Canada a couple of summers ago. I went through almost all the major cities on my bike. One thing I noticed about Alberta, there's a lot more signage of everything, even remotely every interesting thing that they might be able to sell you there are signs for that I didn't see in any other major city.

Moderator: When you say, going back to the California thing you are comparing a specific city in California.

Participant: Ya, comparing the California freeway system to Ontario

Moderator: Any other idea about***

Participant: Pedestrian crossings are a particular problem on Whyte Ave.

Participant: Not enough sleep for drivers.

Moderator: So fatigue you mean?

Participant: Ya.

Participant: Cars that aren't road-worthy. I mean it's rare but it still happens.

Participant: Actually, there's a lot of stalls. I used to always ignore the traffic report and I was working with this woman who was from Europe and she really noticed how many stalled vehicles there were and one time we were coming back from working out in the field and darn it all, there was a stalled vehicle that was hold-

ing us up and she said you don't get that in Europe because they have their regular check ups.

Moderator: Yes, that's correct. O.K. another ... are you aware... is anybody around the table aware of the traffic injuries in Alberta. Do you have any idea? O.K. It's 27,000 hospitalizations per year. That sometimes it's just a visit to emergency and then you are discharged. But a situation where a police man writes the report indicates injury and where the policeman indicates injury then the person is advised to go to the hospital or he is taken to the hospital quite a wide range but of those kind that are sufficiently serious for the policeman to enter that in the report is 27,000 roughly. One thousand more, one thousand less every year. There are 400 deaths roughly, 300 and some and that's the context from where we are working. You know it's just too much. Imagine, you know we are 17 people around this table. How many tables like this go underground every year and how many go to the hospital? Now are you aware of the cost of that, say if we look at health care and health care in Alberta is run by the government on the basis of taxpayer's money and budgets that come from the central government in Ottawa do you have any... you never saw anything figures, that sort... well it's very difficult to pin down the amount but a general estimate when you look at the average cost of an injury collision is \$6,800.00 of medical attention, let's say of health care. Now you multiply those for 27,000. One neck fracture is 800,00 for the first year, and those things pile up because you know require long term therapy. So our figure, rough ball park is 1.6 billion for direct cost of injuries to the health care system in Alberta because of traffic injuries. So it's a lot of money. So now that you know more or less the number of people and the cost of injuries. Do you think that knowing it can affect government officials and people at large in connection with doing something and about taking the problem more seriously or you don't think there is a hope in doing that?

Participant: I'd say no, it probably doesn't matter because people in my opinion, from what I've experienced, they know numbers say for heart/stroke kind of thing and they may not adjust their behaviour knowing those either, so I would say no generally.

Participant: I think in terms of the government taking action I think it would be, if they were given the possible opportunity, I don't think those numbers as horrible as they are not high enough for them to say we need a special commission to handle this. It doesn't seem to be... it seems to be there needs to be worse or it would need to have a solution presented to them probably from a different area. I would imagine.

Moderator: There are two sides to this. One side is the government. The other side is the public. You seem to think your comments have more to do with the public than with the government.

Participant: I think so.

Moderator: The government is the one who has the power to do something. The public is the one who has the power of convincing the government that something should be done about something. My question is whether you think that the money

argument when presented to the public... now I'm focusing in on that could generate an interest in the topic and an interest in reducing that burden. You see, when I say that 1.6 billion dollars for the direct cost to health care, you put that along with the justice system, the loss time at work, property damage, burden to the family, reduced productivity for some length of time depending on the nature of the injury, easily you get to three billion dollars. Now 3 billion dollars means \$1,000.00 dollars a year for every walking Albertan, after tax money kind of thing. So that's what we are paying without noticing every one of us around the table, so question is that would it be possible to believe that we are paying that because we don't know we are paying that and if we were to know it we might take a different stance or do you think it would just slip away?

Participant: I think it's maybe if you make unsafe driving habits socially unacceptable like smoking it might have more of an impact.

Participant: I'd be curious to know if the numbers have come down since there's been a lot of... since now that seat belts are mandatory and there's air bags and drinking and driving programs do you have that indication

Moderator: No there has not been a reduction, no.

Participant: No reduction?

Moderator: No, you know driving... traffic injuries is a bit like the weather. It's a highly complex system, very difficult to predict. It's possible there has not been a reduction but there has been an increase in the last twenty years. Partly because whatever has been improved has been negatively compensated by the increasing number of drivers on the street and people crossing it, the whole thing. So the numbers are today worse than they ever were.

Participant: So the absolute numbers...

Moderator: Perhaps per billion of kilometers driven. If we get into that perhaps there is an attenuating factor but the sheer numbers have kept on going up.

Participant: So I think that might be one reason why I don't really see the money argument as working. It's because... well for an example I think it is related in a certain way during the SARS crisis a few years ago or whatever there was this big push for research and money, etc. when of course more people still die by the flu, but we're more used to the flu and there's this kind of idea that accidents just happen and it doesn't matter how much they cost because they're going to happen anyway. So I don't necessarily see the cost as being a suitable argument for the public to change their minds.

Moderator: O.K. let's take that as an important point. Then what could be the argument?

Participant: I think the number you said, the 27,000. That could draw more attention to the public, especially if it is you know, in colleges and maybe in the newspapers and maybe in television. If they keep advertising, if they keep trying to remote you

know the number of people who are dying every year because if accidents can be avoided, I think that would get more attention, if it's got more to the public.

Participant: Especially if you do emphasize how it can be avoided, like I think that's important, because I remember the bike helmet push that occurred when I was young, the graphic pictures of the kids with the gashes in their heads said wear a helmet and you can avoid this, instead of just throwing numbers and saying look how bad it is we should do something saying better take defensive driving class or something like that. This could be fixed.

Participant: And also people can be proactive and there's not an inevitability toward these numbers going up every year just sort of taking off on what you kind of said.

Participant: I think it's very hard for a lot of people to get a context of those numbers too. It's not something that a general person would deal with on a regular basis and I think the personal impact and the personal stories would be a better route to take and more effective route to take.

Participant: I dunno. I would disagree in some ways at least with the money doesn't matter argument because Alberta got up in arms over the 1 billion dollars that was spent on the gun registry and it doesn't work and it's sort of hypocritical that if we're going to waste 1.6 billion or 3 billion dollars on accidents we, I say Albertans as a whole... we're awfully angry about gun registry but that's a lot less money in the whole scheme of things.

Moderator: O.K let us move on to the second part of the thing. We're going to show you some messages that Blaine and I have prepared and even though some of you believed that money issue might not be an issue, I would like an assessment of the relative value of each one of these arguments and comparisons we make and I want your personal reactions while our long term plan is to use these for mass media campaign, it's not a case of trying to guess what the people are going to react or whatever, that's impossible. What I would like is your personal reactions and the first messages we're going to show you are just straight text and this one says 15 million the direct health care cost for a single spinal cord injury over a patient's lifetime. Now this is with an intention to raise awareness about what is the actual cost of these things. The number of spinal chord injuries per year vary but it is somewhere around a thousand, up and down depending on what happens. So do you have any idea if this could make you register the information or you just don't care at all?

Participant: I think people kind of look at it and say wow 15 million but at the same time, they don't like take it and want to look at it as well.

Participant: I think people sort of see that as a small amount that they would have to pay, like it doesn't... because it's us as province that are paying it, they don't see it as having a personal impact on what's in their pocket.

Moderator: Ya, there is an interesting equation there isn't it? It's as if the treasury of the province doesn't have anything to do with you kind of thing.

Participant: Lifetime just comes across as a big term to me, like it's just you know, it's something that there's no real direct relation I see between kind of money and lifetime. I mean how much normally would be a drain on the health care in a lifetime.

Moderator: You know one of the things that happens the bulk of traffic collisions happens to young people and so when you are looking at the lifetime and looking normally between 30 and 50 years of lifetime after the collision, that's where the cost comes from.

Participant: Actually, I think the lifetime part really kind of hits you more because you realize oh you're stuck with this for the life. That's sort of the difference.

Moderator: Yes, that's normally one of those things that happens with spinal chord injury. The lower it happens, the easier life can be but nevertheless.

*Participant: Sorry, I was just going to say ****I do like the numbers there are not part of the sentence it's sort of separate than oh what am I talking about or what am I reading about and actually I like the way it was set up. It just kind of works for me.*

Moderator: Let's look at another. We can go back to it. This one says, "reducing the number of injuries on Alberta's roads by 15% would pay for 400 new teachers." This is a comparison of two kinds of things. I don't know how familiar are you with the increasing number of students per teacher in the school system, and that happens because there are more kids but there are no more teachers. Now if we were able to reduce this cost by 15% then we would be able to hire 400 teachers. Do you see that kind of comparison as more persuasive than the number alone or do you think it's just a waste dealing with the thing?

Participant: I think to be honest I would wonder what that 15% is in the number of collisions and the number of injuries. Is it comparing the same thing?

Moderator: You mean in the same message we should build in that?

Participant: If it were the number of injuries it would be a large number. It might seem like a big obstacle.

Moderator: You know if we were to indicate the number that I told you so 15% is 4,000 injuries less than what we have now. The reason why we went to this is because we want to look at a comparable dimension that would be pressured by Albertans and the 15% sums in my ears as a visible thing. If I were to say if we were to cut down 50% you know people would not think that's possible. It is actually possible in some places, it has been done but in general it would feel like a bit of a dream. That's why we went that way but any other thoughts about... yes?

Participant: I was just thinking that when you talk about 400 new teachers people would read it but not everyone would respond to it the same way as we students would because we students know the importance of the student to teacher ratio. It is an important issue because other kids, like you know, it's important to have fewer students to one teacher ratio, because the students need attention so they are directed toward the right stuff; but I don't think everybody would respond to it

similarly but the other ad you showed with the 15 million dollars, everybody would probably react to it more or less in a similar way because that's 400 students.

Participant: Ya, the first one 15 million that's a number, it doesn't give who's paying for it, who cares, really. It sounds like someone else is paying for it but this here it actually makes a connection to me, you're right it won't make a connection to everyone but it will make a connection to some people and oh there's a teacher shortage and you know with a reduction in accidents maybe there would be less of a teacher shortage. I feel like maybe I'm paying a little more for the accident with the second comment than with the first comment, where it's just a number and doesn't really tell me anything.

Participant: It makes sense. It's just that you're releasing the number of injuries on Alberta's roads. Like it doesn't make sense.

Moderator: No.

Participant: Yes it does, on Alberta's roads, the injuries on the roads, yes.

Moderator: So how would you say it?

Participant: Or from accidents on Alberta's roads or something like that, I'm just saying like injuries on the roads like I have a bottle of water on the table.

Moderator: You know that we have a problem with the word accident because accident as a word is an alibi to permit things to happen. If you go to analyze every accident you may find 1% as being accidents. Let's say a tree broke as you were driving and fell on you, you know and it was totally beyond planning, but most, the vast majority and I would say something like that 98 to 99% are preventable because they are based on driver error. In the inner circle of traffic safety specialists, we use collision, we use injury but we try not to use accident.

Participant: I'm thinking on. The on doesn't make sense. You have a water bottle on the table. You have an injury on the road.

Moderator: So we should change the preposition.

Participant: It sounded odd to me.

Moderator: O.K. I will check with the pros in English.

Participant: One thing I see in that one when you mention you don't use the word accident, that doesn't really empower me that much. When I read it I say ya, we should do something about that, but it's just this idea that reducing the number of injuries isn't like reducing the number of times you go to the grocery store. It's something that doesn't seem again... it seems like something that is not within our control and I still get that sense that, I don't get any sense that I can in any way respond to the number of injuries.

Moderator: Approximately 1.6 billion dollars are spent in Alberta every year in health care alone because of traffic injuries. I mentioned the number a few minutes ago. My question here is does 1.6 billion mean anything to you or should one go to

a comparison. Let's say for instance, I was doing a little 1.6 billion dollars will buy 10,000 homes, \$160,000 average. Now ten thousand homes is difficult to imagine them but that will be an area of the city when you go to a residential area and you have single family homes of about 30 by 17 blocks that you can buy with this money. So if one instead of talking about quantity were to talk about comparisons of that kind would you think that would be more imaginable by people or do you think that it's good to stick to the dollar figure?

Participant: I vote for a comparison.

Participant: Yes.

Participant: I like the first one because it's focused on one patient and it made me think in my mind how many patients there are and then I would have to multiply that for a total sum.

Moderator: This means, this one means about 25% of the health care budget, so it really harms the performance of Alberta health care.

Participant: It struck a chord with me. The 25% of the whole budget that they have. That struck a chord right now.

Moderator: When I have been working in this field for 17 years and you become, I dunno, like unable to judge what means what for the rest of the people and sometime people who have a context that work with these kind of figures, people who are in budget issues, might have a sense, but maybe people around who have no jobs, individually have an idea of what is a million dollars but 1.6 billion sounds difficult.

Participant: Actually, I kind of like that focused one and normally I do like the comparison like when they talk about electricity you know this plant you know, whatever like this many homes but I really didn't care for that last one because it was too political and probably cuz like she said it affects different people different ways. But this one's really direct and you can use your own head to decide what you're going to spend it on.

Participant: And if it was something comparing to when people compare something to say 60,000 is the number, oh well it's as many seats as there are in Commonwealth Stadium, that kind of thing really resonates with me personally if I can picture it or the Colosseum 17,000 or whatever.

Moderator: Ya. Traffic collisions cost Albertans 3 billion per year, nearly matching the funding that grades K 12 receive. The education budget is 3.2 billion and when I look at the compound costs, the direct costs, etc. we get to something like 3 billion. How do you feel about that kind of comparison?

Participant: I think that really resonates because comparing the traffic injuries to the education, I think no one can really say that education isn't really necessary. Everyone thinks that education is completely a necessity, whereas traffic injuries seem so needless, senseless, such a waste, so I like that comparison.

Participant: Ya, I agree, because even if we're not like... I happen to be a student but to me a lot of families have kids or a lot of people have themselves education so a necessity that's a really good word for them.

Moderator: Now Irene and Seignor have been very quiet. Do you have any reaction?

*Participant: I like this one better than all of those three because it gives you the big number and then it also compares with something that's concrete that you can imagine and like some people look at that 1.6 billion dollars. It doesn't mean anything to me but it means something to these other people but ****

*Participant: As she pointed out the accidents are absolutely unnecessary and such a waste. The very fact that you're talking about grades K to 12 to me, I feel that *** into the budget that has been allocated to grade K to 12 and devoting that money into something unnecessary, it's just you know provincial waste. Instead of doing that we could have done something much more worthwhile.*

Participant: I like this one because it's a comparison and it puts it into perspective. I think in a message like that I like hearing words such as taxpayers pay you know cuz then it's also impacting on me like taxpayers pay almost the same to fund all high schools as they do for their accidents I'm thinking oh I'm paying for this, you know but I definitely like the comparison rather than just a number up there.

Moderator: Sounds good. Reducing the number of injuries on Alberta's roads by 20% would pay for 1,324 hospital beds. Ah this is a little bit kind of excessive in details 1,324 sounds a bit we might have to round that up but the notion now was to look at the same health care. It's putting money here and then it's short there, I don't know how or where are you about you know the lack of reliability about beds in connection with people who need to go for surgery and need a bed. If it's not urgent they may have to wait three or four or five months whatever. Ah, do you see any value in this one?

Participant: I think that comparing, by just saying the number people can't visualize it as well. Instead of comparing a percentage to a percentage they'd kind of be able to see O.K. they can be increased by this percentage instead of a number, cuz you don't really know. There's how many hospitals. How many beds would that be per hospital, it might just be like let's say two. So if you say a percentage.

Participant: I think it's kind of vague actually. Like you have 20% but that doesn't really translate into numbers and you go to any hospital beds where are they're spread all over the place.

Participant: Does that mean like the physical bed or like a bed space for one night for one patient or like what does that mean hospital bed? It's hard to sink your teeth into.

Participant: I've never liked hospital beds comparison, I guess cuz I've never really understood it like I've seen it in other things before.

Moderator: Ya, when we mention hospital bed we mean the hospital, we're talking

about a yearly reduction of traffic injuries and therefore is a yearly cost of a hospital bed and it's the bed that stays the attention, but maybe it's too abstract

Participant: I kind of like that one because like coming from rural southern Alberta we've had a lot of hospital closures down there and so I think maybe for people down there that would resonate more so than someone in the city where there is generally a bed available somewhere within the city.

Moderator: Ya, there are two issues here. One is whether the hospital beds is a sensitive spot to touch. The other is the way in which the information is presented. You know how much is possible for people to visualize O.K. this *** and that *** kind of thing.

Participant: Why would you need all those hospital beds if you reduce the accidents. You don't need them anymore right?

Moderator: That is quite true. The point is we have the accidents and we don't have the beds.

Participant: What I do like is the actual the number not being rounded. I do like that it's a real figure. Ya, I like that.

Participant: One problem though. Going back to our problem to the use of hospital beds cuz it sounds like the professional aspect it also refers to the care and what have you but I think the cost of 1,324 beds in my mind doesn't equate to all that much and so then I don't think that the 20% that isn't as much as it obviously is.

Moderator: Is it like going to a furniture store and buying 1,324 beds. It's a bit more expensive than that, yes. You're right.

Participant: I think that goes with what you talk about houses too. You mentioned that. Like there's all those different kinds of houses, there's so much variation so. So something like the K to 12 seems to be the one that people are most...

Moderator: More concrete

Participant: More concrete. There's a vagueness there too, everybody can relate to that. Wow that's pretty widespread.

Moderator: The increase in collisions has led to a 350% rise in Alberta's auto insurance in the last 15 years. How does that sound?

Participant: It's sort of redundant. Everyone knows that insurance has gone up. It doesn't really give any new information. But people don't like the fact that it's gone up. If they can relate it to something like this then perhaps they can say well if there's less collisions then it won't go up and I won't have to swear every time my premiums go up every four months.

Participant: It's not just like it's going up by like 100% or something, it's more than a 100% so that's kind of more of an impact.

Participant: I'm nodding my head. That one really appeals to me.

Participant: It doesn't really appeal to me for other reasons. For instance insurance premiums are a highly political issue. My thoughts are there's more to it than that.

*Participant: You see I was going to say if you say that the increase in collisions is directly responsible for the 350% rise then I'd be wholly **** but otherwise as you said you're like well...*

Moderator: This is a very complex issue, no? One of the things that was happening a few years ago was that the insurance industry wanted to contribute to any effort to reduce the collisions in Alberta because we had twenty-eight cars per thousand getting involved in collisions while Ontario has 26 cars per 1000; so their policy on budgeting for the operation of the industry was based on Ontario and in Alberta they were losing money because there were more cars involved in collisions per 1000 cars. So at that point they were looking at two things. Either to charge more for Alberta drivers or to try and reduce the number to be equated with Ontario. There would be many other things but the point is that there is correlation. The worst thing involved is that traffic collision suits have become an interesting business for lawyers and so the whiplash and all that kind of thing led to enormous bills against insurance companies because the clients have claimed to be injured somehow or other. So I agree that it's complex but, ah but I'm interested in your reaction to the face of the message whether it is a subject that you think has merit. I see that if aligned with Stephen's comment about taxpayer because you know insurance premiums is something that all of us could drive paying so it would be nice if they would not keep on going up, but that's my own assumption.

Participant: Pardon me glancing, if there's a mass media campaign glancing at that type of message to me the 350% would have more impact as a 3.5 times, just cuz when you involve math a lot you have your depending on I guess on the demographics you want to advertise towards there might be different interpretations of the percentage, like is 100% the same or is it twice as much?

Moderator: Ya, I agree with you.

Participant: And yet it's funny, for me that number did jump out as it might have for others as well. Not just a 100 not 106% it's 350%, that ya...

Moderator: A single injury due to a traffic collision costs as much to treat as 31 MRI scans. This is based on the average costs. A single injury could be 50 million dollars or it could be 350 but when you look at the average cost, that's what it looks like.

Participant: I don't think that one's that great because I don't think a lot of people know how much it costs to run one of these scans, like I wouldn't know...

Participant: You just go in there and you sit on a bed and they have this whole machine that's been there forever and you don't have to pay for it personally though

Participant: When I think of MRI I think of the time to wait to get one, that's what I always hear, it takes forever to get one but not the cost of it. I totally agree with that.

Participant: These are machines, so like I mean the problem I dunno isn't like the machines aren't at capacity, it's there's not enough of them, so I dunno.

Participant: Actually, that kind of appeals to me because you're right the MRI is an issue and you're saying that wow, reduce traffic accidents and you could have more MRIs so even though I don't know the details, I guess that comparison's a lot better and I think it does appeal to me that way so maybe it's almost like because I don't know enough about it and it's vague it gives me the information that I can relate to.

Participant: I find that if you don't need to get an MRI you really can't relate at all.

Moderator: Ya, I have you know when discussing this now possibly if I have people over 60 sitting around the table I might get a different reaction because they personally might have been more likely involved in having to get one or their wives or their husbands or something like that, but you know I don't know I'll keep trying and see whatever... Non injury collisions cost Albertans nearly 600 million per year. This is we're just talking about fender benders to whatever... property damage basically. Any reaction?

*Participant: It's too big a number, for me it doesn't work I can't really wrap my mind around it but I like the ones that would say something that would resonate is oh that would cost you a \$1,000 a year, the personal one person or that ****

Participant: Non injury just doesn't sound that... it just doesn't jump out at me at all you know. It's not exciting and sexy like spinal chord injury or something like that. You know like right off, I'm thinking of not getting injured and so I'm not really as engaged with it as it is and so it just didn't come across to me.

Participant: It's just not very dramatic.

Participant: How does a non injury collision cost me anything? Because I know I pay health care but I'm not paying for someone else's fenders to get fixed.

Participant: I think that those are a lot more complicated. I suppose most people know people who have been in fender benders. I think they're a lot more common it seems it's something that could happen to you.

Participant: In terms of the layout it's nice but that collision logo, the black with the red I think is really really nice, regardless of the message, that's direct.

Participant: I guess to me it's kind of vague, 600 million, are they talking about insurance and health or just health care or that I guess I would look at that...

Moderator: Just property damage here.

Participant: Oh right, O.K. I wouldn't know that.

Participant: I guess it's just something people have to accept. Like I say everybody gets a fender bender here and there and a lot of us don't even make it to that too

either. You just fix it yourself. It's almost like if you can reduce the collisions to just fender benders, if that's the worst thing that can happen, then...

Moderator: I think there were 110,000 collisions last year. Twenty-seven thousand of which involved injury, so there would be 90,000 let's say non injury collisions. That cost people money, now anyway, but I think you have good points raised here. Now I wanted to ask you if you can react to sort of issues of generality of *** Do you find you react more when there is a comparison with something that is relevant to you? Or do you prefer the numbers with the money just isolated?

Participant: Something that impacts me I guess it's a comparison where everybody has had a general experience, like the K to 12 everybody went, most people went through that, through the same experience whereas the hospital beds, not everybody can relate in the same way. For mass marketing that would be the best way to go, is to find a similar experience and compare that.

Participant: Fear always works well too, like the more dramatic injury that's one thing is why I'm not too concerned about getting into a non injury collision but I am concerned, especially if it's preventable into something that could leave me permanently injured.

Participant: What I liked were those numbers where you get say the 3.2 billion and then you give a percentage of that. Twenty-five percent of that wow, it's such a huge number something overall and then a percentage of that and then I don't know if there's comparison in there too, but that resonated.

Moderator: So basically what you are proposing is that there would be enough context, so that people have a handle to hold on to kind of thing.

Participant: There's that one where it said 1.6 billion is the cost of health care I think when you mentioned it was what, about a \$1,000 per person, that would have been more effective to me personally if it had been a cost of a \$1,000 per person would be health care costs.

Moderator: Ya, how it hits your own pocket kind of thing, O.K. Now the same messages, Blaine prepared them with an image, we can pass them a bit around. The content of the message has been read. The question general is do you think that the addition of an image might help or hinder the power of the messages and for particular information for the actual images you have there because you may have another image in mind, but we have the same eight messages you can check the other the MRI that we talked about. Instead of having just the message we have it with an image. When you look at them, do you think that your attention will be more driven because there is an image here or do you think that it's better to keep the message sort of totally and no [?]

Participant: Isn't the two I've seen here so far I think the images are suitably vague enough to continue my attention on the text whereas I think if it was just text especially when we are just so inundated with advertising it would be much easier to just ignore it, whereas in this case I mean my eyes were immediately drawn to both

pictures and I didn't find the text on the MRI that compelling but I found my attention is still grabbed by that particular image.

Moderator: Reducing the number of injuries on Alberta roads by 15% would pay for 400 new teachers. We can begin here.

Participant: ..but I still think it's kind of political too, so that's probably why.

Participant: The MRI one, I still don't really relate to that even though there's a picture although the other one, the burned out truck, that really, yeah it's vague enough it's really... that could have been anything happening, it kind of draws you in but then again if the message is right, I don't know that 1.6 billion and say we did the \$1000 instead per person and if it's just the background, say the white background, or the black and then if it just had the white in it and if the message is right then it doesn't need the picture if that makes any sense like, no I like the pictures. Sorry.

Participant: I feel more driven just to look at the picture and just I just draw a blank at like the wording but with the other one I actually would read it.

Moderator: If you do you read it. Let's forget about the non injury collisions because you people don't seem to be...

Participant: Actually I have something about the fear factor and I took a marketing course and I know he said that there was like a computer to check with marketing directors, you may want to check with them too I can't remember exactly what he said but I don't think it's as effectively as it seems to be, like I know you get your emotions going at the time but I think in the long run we found, marketing people found that the fear factor doesn't work that great, so, but you better double check that with a marketing expert.

Participant: I know what I wanted to say before. If the message is succinct and refined enough and it's a really good message that either draws on your pocket book or the K to 12 things, generally people I think can relate to, just my opinion, then I think it works just having the text but if there's other factors or if there's some vagueness in the actual message, I think the picture really helps. That's what I wanted to say.

Participant: Sometimes the pictures are really necessary like the teacher one. We all know what a teacher looks like. Maybe show what 400 teachers, like show 400 people, that might be a bit better and also with like the fear factor thing um...

Participant: I forgot what I was going to say.

Moderator: Andrea, you wanted to say something.

Participant: I think it really depends on the context of ad too, like if it's in a newspaper versus if it's on a billboard, you know like is there lots of stuff around it or am I just kind of (?)

Moderator: This is the one on the 1,300 beds, so reducing the number of injuries on Alberta roads by 20% would be equal to 1,324 hospital beds.

Participant: It's a cot.

Participant: See, again, I look at that and I think well how much really can 1,300 of those really cost and I think just having that concrete image like you said with the house as well as K to 12 which is something we know but is still abstract enough you think wow that must cost a lot.

Participant: I think with the K to 12 too that it's spread throughout the province, like you don't know how much it is but you know it's gotta be a lot.

Moderator: This is a K to 12. Any reaction about the image?

Participant: Well she's cute but I think you should have more kids.

Moderator: Cuz you know it's a toss between sort of the appeal of the single person that becomes real, she's not hiding in the numbers or the sort of presence of the numbers that you see not how many people like you're talking about a stadium. So I don't know really, like this is *** 6 billion dollars are spent in Alberta on health care alone because of traffic injuries. One of things that we have found here and there is dangerous drivers. If there is anything we are sensitive to, it's babies and not about the rest of the world, except with a sweetheart sometimes, not all the time. So we have found that sometimes that an individual image may wake up in people some thoughts about protection and that's where we come from with ideas, but at the same time you know, we are curious and that's why we produce them as test material to see what your reactions are.

Participant: The picture on the right and the text, I have no connection between the picture of the baby and the cost of health care. I'm sort of looking at that and going why is there a baby in the picture. You're not talking about babies. I mean the one on the left, you know your talking about K to 12 and that's cool. The picture on the right, the text and the baby, you don't really relate to

Participant: It's a sick baby, I'm not sure how happy it looks.

Moderator: It's in a car. He should be happy.

Participant: I think having the single one is good. I think the one with the truck, like you have to look at it for a little while, I mean it really fit with like here's a total truck, but I mean when you first look at it it's a very busy picture.

Participant: I feel a little too close to the kids in the, or the baby in that one. I can't even bring myself to focus on the text, I just can't. You know I almost feel like my personal space is being invaded, whereas in the other one with the kid, I could look at it and then don't look at the text as well and I assume you want people to be able to read the text.

Moderator: You mean like this one?

*Participant : Although with that one, it's a clean kid, not the baby one, the school kid one. It looks like a nice clean school to me and she's got a book so they seem to be doing all right like if they're showing a ratty old busted out desk and a kid with a ripped up book, I'd be like oh education ****

Moderator: If you wanted to see a teacher facing 38 kids in the same room and trying to control them, O.K. Fifteen million, the direct health care costs for a single spinal chord injury over a patient's lifetime.

Participant: That's pretty effective.

Participant: I like the ones like it's a hard like thing between, the first one's really nice with all the white space and then like the truck one especially the first, like there's still a whole bunch of space with all the blackness and then like, whereas I think you said like some of those kid ones, just a little bit, I like the space.

Moderator: Do you think for instance that the text should be larger as within the real state of the surface of this. Cuz I dunno, some of you were saying O.K. just keep on looking at the picture and don't read the text. Any thought about that?

Participant: The text is kind of small from back here. I have to look, like it's almost to small to read, but I can clearly see the picture.

Participant: I think Andrea's point was very pointed, it depends on the context, like I think just the text would work far more effectively in a newspaper or somewhere where it's really busy, whereas this would make a great billboard, but perhaps the text should be a little bigger, not much.

Participant: Just going back to that baby one, I don't sorta doubt the baby one but just maybe an active kid I don't, for some reason that just seemed very sedentary and very still and if it were a kid running around with a ball in his hand kind of thing or crawling or something that just seemed I dunno fixed or not, but active, like what you might be missing or something.

Participant: What did a baby have to do with it.

Participant: Ya, no I agree.

Participant: I still don't understand that.

Moderator: The future of Alberta

Participant: Ya, I kind of like the baby because, with all sort of, health wise, what are you going to do for my future, are you going to take care of me?

Participant: Oh, I do, what you mentioned before about the collision, I wasn't even really noticing that collision thing, I just thought it was something, some trademark or something but on these ones it seems to come out a lot clearer than just with the text.

Moderator: Ya, it was supposed to create some kind of a recognizable identity for

the whole set of things, that you see one there, you see one another there, I dunno, things keep on piling up in your sort of consciousness.

Participant: You're in the design department right, so like I don't know much about design, I went to this one lecture, someone in your department who talked about design, so I guess I presume that you got the right colours and like I thought, you know like in Powerpoint they say don't put white on black or something, like I dunno, anyway, so I guess you must have the colour codes and the font.

Moderator: Ya, it's all somehow or other based on an extensive experience, but what happens in this field is that you cannot really have hard and fast permanent universal rules, depending on the context of implementation and depending on you know, the medium that you're using, etc. seems vague and that's the reason why there is a focus group and that's the reason why there would be other things sort of to reach finally the development of pieces which are sort of well contrast they will do something. What happens yes as a departure point we use existing information to produce things in a given standard. It's like medicine, you know you have a bunch of knowledge about a disease and you have an individual person who is sick and that one has always to be adapted to the situation and requires some let's say art which and you know one thing Blaine I thought we should be on the web site if they feel like... Blaine has prepared a web site with these images, seeking sort of responses from people. So if you want to take notes in case you have any afterthought that you want to see the images again, you can see them there and otherwise if you just want to get back to me, you have my e-mail and you can do it anytime. Do you have any other general comment, let's say something that you want to tell us before we split, either particular or general. Aldon?

Participant: Going back on what Anthony said with I guess the fear impact, something totally on personal perception that I noticed might be right or wrong but have these campaigns shied away from a lot of more grotesque images of the past, cuz for me personally, some of the images that I saw back around ten years ago approximately, those still stick with me a lot more than a lot of ad campaigns that I see this day.

Moderator: The images that you saw about ten years ago were produced by ITV on the basis of I dunno whether they have an agreement or whether it just copy an Australian campaign that was actually better than what ITV produced. I am personally in favour of using real things, because people who are opposed to that, let's say in parking images, people who are opposed, say people in Canada are not like Australians you know, we are more polite ya, but when you are shot through your windshield, that's not polite, you know it happens the same you crash the same way and it's extremely horrible. However, when you meet with the advertising agencies locally for the production of films, I have been involved at the planning level for a number of years, there is a tremendous resistance you know, they want to keep it abstract and I dunno why. The campaign that used those kind of things that was sustained in Australia was extremely successful. Of course it was not just a campaign. It went hand in hand with enforcement and with radar and with alcohol tests, you know the whole gamut. It's the only way. There is no hope. If you put you

know posters everywhere, nothing's going to happen you know but that's a different story. O.K. any other... yes?

Participant: I dunno exactly what we were trying to achieve with these campaigns but when I see these, I just look at it like oh that's an interesting factor wow we spend so much money on it but how would I actually, like what would I do to reduce the number of traffic collisions because everybody thinks that they're a good driver and nothing's going to happen to them or people know that they shouldn't drink and drive yet they still do it.

Moderator: Well I tell you what happens here. I have been working for a number of years on the notion of pain, you know, and trying to make people aware of how painful this all is and I haven't succeeded. Let's say I haven't succeeded to convince the government that there is a need to invest a slight amount of money to change the existing reality. So I thought maybe money will generate more of an outcry. We saw headlines in the newspaper "Kyoto Accord cost bulges another 3 billion dollars". Well, you know, it's a pity that they say that because I think that the cost of not doing anything is far greater. You know we're not going to be able to breathe in a hundred and fifty years, but at any rate, that makes the headlines, O.K. Because it's money, "Oh God, that's too expensive, we shouldn't get involved in that kind of thing", but at the same time we are involved in this idiocy and it just goes as a matter of you know everyday life. Every year in the United States there are 50,000 deaths in traffic. That's exactly the same number of people who died over ten years in the Vietnam war. Now the Vietnam war was a major American disaster domestically speaking, you know, tension between government and people. Nobody wanted to know anything about it, compulsory conscription, all kinds of bad memories of that. Nevertheless, you know when we go to this other issue, totally thick skinned. They say well, you know that's the price. So that's what motivates us as people interested in communication, is why people choose to pay attention to some things and choose not to pay attention to others; and how can one from let's say a communication stand point create a change there? So at this point I should tell you that the government indicated they are really committed to doing something but then there was elections, the government won again so I don't know exactly where we stand today. I thank you very much for having come and you know we have the payment that we promised, we need you to sign a receipt for that so as you come out here I will ask you... (end of recording)

Focus Group Session 2

Moderator: Everything's here, the rules, O.K. Happy that you find the place with no problems. So, the first question I'm asking and this is to anybody and everybody and not anybody in any order. We want to know what you like most about driving. Do all of you drive or is there anybody here who doesn't drive? No, everybody knows how to drive and has some experience there more or less. Is everybody a student in the university, is anybody here outside the university environment? You are not a student at the university at this point? I'm just curious, it's general, I want to know the kind of mix that we have here. O.K. so tell us what you like most about driving.

Participant: Convenient.

Moderator: O.K., what else.

Participant: Driving for pleasure

Moderator: For pleasure

Participant: Being able to see lots of things in a short period of time.

Moderator: O.K. I just take notes because sometimes I like to do this *** that *** technology contrasts and you find there's nothing there, so just in case, but don't slow down your speed because I'm taking notes. Now, who else, what else?

Participant: It's faster than public transportation.

Moderator: Yes.

Participant: You get to a place wherever you want to go.

Moderator: Oh well, sorry. Ya, so you get to take people with you.

Participant: Well, it feels very safe. It may not actually be safe but it feels safe. Also, you have a certain amount of privacy while your driving as well.

Participant: You can turn up the stereo.

Moderator: O.K., ya. It's a short list so far. Let's see this other one. What do you dislike most about driving.

Participant: Rush hour.

Participant: People so impatient.

Participant: People using cell phones like that.

Participant: The cost of owning a vehicle.

Participant: Associated costs.

Participant: Trucks.

Moderator: The trucks. Has anyone here driven elsewhere, outside of Edmonton. Ya,

so where, Mexico.

Participant: *Columbia.*

Moderator: Columbia.

Participant: *Scotland.*

Moderator: Scotland.

Participant: *Kenya.*

Moderator: Kenya. And yourself?

Participant: *I didn't actually drive, I was a passenger. Philippines, Russia and the U.K.*

Moderator: So what is your experience comparing differences, similarities?

Participant: *Canadian drivers are slow and very safe compared to Scottish drivers. They drive very fast, always on the edge.*

Moderator: And yourself?

Participant: *Very cautious.*

Participant: *Reckless. They don't care about pedestrians lives.*

Participant: *I was a passenger in Europe and I guess the driving education that you have to take is a lot more serious.*

Moderator: There.

Participant: *Ya, I mean here you can basically fluke your drivers test, that's pretty much what I did when I got mine and I mean I got my license so...*

Moderator: Nevertheless, on the one hand the tests are harder, particularly if you go to Switzerland or something like that but the driving is more chaotic, particularly if you go to Italy or something.

Participant: *Ya, that's true.*

Moderator: And how about Columbia? I never drove in Columbia.

Participant: *Very well, like people on the streets gonna let you drive like you stop-
ping *** it's terrible and they don't *** you're gonna cause *** if they do*

Participant: *Lots of jay walking, like in Kenya.*

Moderator: You know I was curious about this because when talking about dislikes about driving in the other group, there was a lady that came from Bombay and we complain about rush hour here.

Participant: *Don't have a clue!*

Moderator: So let's go in this context. People elaborated on what you like, what you dislike most about driving. We said rush hour, impatience of other people, cell

phones, the cost, the trucks.

Participant: Road conditions.

Moderator: Road conditions, slippery roads, so problems related to weather.

Participant: The conditions of the roads, the pot holes, the speed bumps and then the parking lots that really don't have to be there, cuz you don't need one every six feet.

Moderator: O.K.

Participant: I know something related to the conditions. Driving on the highway in the wintertime feels very unsafe in my opinion.

Participant: The stress of driving, especially when the people around you are the conditions.

Participant: Careless drivers on bad roads. That really worries me a lot.

Participant: Indecisive drivers. They don't know whether they should go or stop. They just do half way and annoy everybody.

Moderator: Do you feel yourselves that when driving you get and you find a number of dislikes lets say at a given time. Do you get uptight and tense and sort of know to do things that you don't want to do.

Participant: And say things you don't want to say!

Moderator: Is there any of that experience? Does it actually relate or just...

Participant: Every time you get...

Participant: Road rage.

Moderator: Ya, road rage. Is there such a thing.

Participant: Oh definitely.

Moderator: O.K., let's move to the next one. What do you think are the most common causes of injury collisions in Alberta?

Participant: People being in a rush and careless.

Participant: Following too close.

Participant: Fatigue.

Participant: Road conditions.

Participant: Impaired driving.

Participant: Distractions in the car, I guess, like turning down the car stereo.

Moderator: Are you aware of the traffic injuries in Alberta? Do you have any idea of the number? There are 27,000 traffic injuries per year more or less in the last couple of years, so and by injury, it means that the police officer that files the report, reports injury and this has a very wide spread and it's very difficult for us to determine exactly how serious, how light it is but it's 27,000. It's interesting that it's normally not known, 27,000 is a lot of people. It's more than all the students of the University of Alberta. You know, we are what 13, 15 people in this room. You know how many rooms like this? It's a lot, but you don't hear in the media, you get a catastrophe, there is more...

Participant: Although it seems like such an every day occurrence, every day on the radio you hear there's an accident here, there's an accident there, it really doesn't sound like all that much.

Moderator: But in the radio they many times report it for practical reasons... blah, blah, blah, because there are four corpses there and there. Terrible for the traffic flow. So, interesting thing...

Participant: Can I ask how does that compare to the other provinces?

Moderator: It's not that far off. We're a little bit worse than Ontario but more or less it's about that. And are you aware of the costs of traffic injuries in Alberta? You know, this is one of the things that we are looking to hear.

Participant: I know for example, you get into a car accident. To get the people to clean up after you it's extremely expensive. If you need an ambulance it's about 500 or a 1,000 dollars and that adds up.

Moderator: Imagine that you have 27,000 people every year that requires some kind of medical attention. You have 400 that die and you have 120,000 or so collisions. So if you look at the costs and it's something that we have been trying to ascertain with some kind of precision. Our estimation is that health care alone will pay about 1.6 billion dollars. If you come then after with *** and neck fracture is 800,000 dollars per year. Now we get 1,800 spinal chord injuries per year in Alberta between say people who get a minor injury and then recover in three or four years to the people who become permanently paraplegic. So those are the expenses. We don't look at payment, we just look at cost. The average cost for an injury collision is 6,800 of medical attention. Now you add to this cost, you add property damage costs, you add days of work lost and stress in the family looking after one of the members you know it's a... We estimate that the compounded cost is about 3 billion per year just coming from traffic injuries. So that means 50% of that health *** enough that elsewhere. It's like 1,500 dollars from each pocket of every baby, adult and old person in Alberta. Now that you're aware, do you think that knowing this can affect the way people react to the problem and this position of government officials to do something about it or do you think it's not going to generate any reaction?

Participant: I don't think that's actually affects anybody's driving anybody's habits because people hear that and they'll be shocked by it and they go and drive the same way the next day.

Moderator: Now, for instance, let's say if there is a public outcry because we are, you know that one of the problems that happens is that the health system foots the bill and as a consequence, they cannot do other things. Let's say you want an MRI because you have a knee injury and you're not dying, so it's going to take four or five months to get your MRI. You want counsellor surgery which is not life threatening, you are going to have to wait four or five months to get a bed in a hospital. So some people are going now to the States to pay and get it done. I needed an MRI, I paid because I thought it was ridiculous, six months to wait and see what was happening there. Why is that? Because the system is stressed through looking after the injuries. If you think that traffic is similar to accidents in industry, more or less the same number of people in the workplace. So you put those two together and you get 50% of the health budget. So that the health budget which is conceived to deal with the ill, cannot deal with the ill because you have to deal with the urgent injured. So, in that sense if this becomes publicly known, do you think that the government may become more sensitive to working on prevention than on patching up? Do you think that could become a *** issue?

Participant: Are you talking about municipal or provincial?

Moderator: I'm talking about any level of government. Basically I'm talking about provincial government, because we were looking at figures in Alberta.

Participant: I don't see the provincial government actually doing anything towards prevention in that area but municipal maybe, like an injection into the public transit system. If more people are on a bus or a train there's less opportunity for an accident, but Ralph Klein, no.

Moderator: You know before the elections, Ralph Klein promised to do something about it, but now I don't know.

Participant Don't know a lot of things.

Moderator: I don't know. And since you brought up the subject we have the provincial government, we have the municipal government, and then we have the ridings, lets say we have kind of smaller units. Do you think that possibly, the smaller units would be more accessible for public opinion having a weight than larger ones or you think that there's no hope anywhere?

Participant: It would depend on who's representing you. I think your faith in them, they're actually gonna take what you say forward. I don't personally have much faith that government on any level would take this as a priority.

Moderator: Unless possibly people are really mad about it. Let's say for instance, you know, in the United States during the Vietnam war, people were mad about it, nevertheless the war continued for ten years, but there was some kind of a public demonstration of opinion. It is kind of funny because in the United States there are 50,000 deaths per year in traffic and 50,000 deaths was the cost of Vietnam over the ten years, American personnel. That was a scandal, this is a matter of, you know, daily life kind of thing. So, what we're trying to look at, because I think, I think, we think it's really sad that so many people would end up, you know kind of maimed

and killed but we don't know how to do something that would raise that kind of a reaction.

Participant: *Would you be able to compare this to campaigns against drunk driving?*

Moderator: It's part of it.

Participant: *Because, I think, now I don't know of the figures but has the death toll or the number of people injured due to drunk driving decreased because of the advertising that has...*

Moderator: *** Let's say drunk drivers are responsible for 9% of injury collisions and they are responsible for about 27 to 40% of fatalities. So that normally what happens is that the majority of drivers that get involved in injury collisions are sober, but a significant percentage of drivers that generate a fatality are drunk. So it has to do with the severity of the collision that changes the picture, but on the one hand that's why I say drunk driving is a part of the equation, but we should not just zero in on that, because the majority of drivers are sober.

Participant: *No, but I'm saying if because of this advertisement they had more public awareness come out or if you sort of took the same angle as that in any sort of traffic...*

Moderator: Drinking and driving if you look at the long history, let's say the last thirty years has changed, but if you look at the last ten years, it hasn't. Basically, drinking and driving in the 1960's was fine. I mean, you went, you got drunk, you went to the ditch, you got out of the car, lifted the car back to the road and***. Now let's say it's not that much regarded that way.

Participant: *Did you say that you estimated that 50% of the health care budget was going to traffic...*

Moderator: Injuries, no, no, 25% to traffic. The other 25% to industry injuries.

Participant: *O.K., so it wasn't industry car accidents or anything.*

Moderator: No, no, no.

Participant: *It was injury accidents altogether.*

Moderator: Ya, accidents in the workplace. If you look particularly, this happens in the oil fields and in the large factories.

Participant: *Ya, people falling off ladders and being crushed by ****

Moderator: Ya, and sometimes they overlap, because many people engage in traffic collisions while being at work, let's say people who drive as professional drivers. So it's sometimes difficult to tell the figures apart because...

Participant: *If it was 25% I think that the federal government would have quite an interest in that just because, I mean there's so much emphasis nowadays on the health care system, especially the recent campaign that Paul Martin had and I think he would have quite an interest in reducing the burden on it.*

Moderator: You know it's huge and it's interesting because Alberta is let's say 10% of the country basically, you know rounding off figures so that you get to gauge if here we spend 1.6 billion then it will not be 16 billion across the country because Alberta is one of the provinces with more money in health care, but it will be about that. So, if we say 15 million dollars, it's very difficult to imagine that you know Blaine and I have been talking about what does that mean, well it means sort of in Edmonton 10,000 single family homes you know, now how many city blocks that means, how many city blocks can you buy with that, you know and it's quite a number, but it's very difficult really with everything such high figures that ah so we'll come back to see how meaningful they sound to you. Now, is there, is there any idea that you can have that can persuade the public to take more care of this on the basis of it affects the public well, you know, it affects the common as I said, you know it's 1,500 dollars per person living in this province. Is there any way that you think one could bring this to the attention in ways that are understandable convincing of the scale...

*Participant: It has some consequences*** consequences when you run a red light, when you drive whatever traffic violations there are that, you know, the first time it's 500 bucks, second time it's a thousand, you know, if people could actually, if the money was something out of their pocket that they see, the 1,500 per person would seem to me like it's a hidden thing, because nobody's writing a cheque paying it out. I realize it's through taxes and everything but if it was something that actually came out of their pocket and people recognize driving as not a right but a privilege, I dunno, I think that would be...*

Participant: I think it needs to be vague too, I think people need to...

Moderator: It needs to be what, sorry?

Participant: It needs to be vague, people need to see the whole picture and they need to see it quickly. Like I think I can relate it to the smoking incident Barb what was her name...

Participant: Tarbox

Participant: Tarbox who was the smoker who had cancer. Like she instantly put a name to smoking and risks and people die. It was easily branded. People saw that. People don't think about traffic accidents as a reason why they can't get an MRI scan. If they could see that, maybe they would think differently about it, but it's accidents right, people just think well it's an accident what are you going to do.

Moderator: We have in a way two fronts here. On the one hand is the people at large, you know, because they are the ones who fill the roads of Alberta and on the other side you have the government, let's say if the government were more concerned about this it would take action to devise policies, also engineering, you know, improving roads that way, conditions so that it's less likely to engage in a collision. So on the one hand we have the problem of convincing people about the need to be more careful, on the other we have the challenge of telling government that it's a serious issue and they should look, put it in their agenda. You have any idea? We talked a little bit about how to bring it to the attention of people. Any way

that you think could be brought to the attention of government? You mentioned ***** an important point of access, in terms of who to address, but in terms of how. Any idea?

Participant: I think that too, like if you were going to take it to the government they talk about money because, I dunno, the money that is being wasted is something.

Participant: Maybe some lobby groups that targeted the ministry of transportation or the ministry of health or whoever are directly involved in those types of matters.

Moderator: O.K. Now we are going to show you prototypes for messages Blaine and I have been preparing and we would like to collect your opinions and reactions to that. Please be candid about your reactions and tell us if you think these messages might help raise people's awareness about the traffic injuries problem, might prompt them to do something about it drive more carefully or write to government. So state your personal reactions to these things, rather than your thoughts about how you think people in general would react to that, don't try to second guess what two million Albertans are about, just your personal opinions. Just to make it clear, because it was a conversation I had with one of you before the majority came. This is not statistically valid what we are doing. We are not looking at O.K. each one of you represents 800,000 Albertans. This is just to see what kind of opinions come out, O.K. So, Blaine, do you want to take over the showing of the stuff.

Moderator assistant: Sure. I'm just going to read this one out. Fifteen million, the direct health care costs for a single spinal cord injury over a patient's lifetime.

Moderator: You have the cost immediate, as I said, you know between 300,000 and 800,000 for a fracture in the backbone, but then this person keeps on being a burden through a lifetime. You think that

Participant: Are you asking us to talk about the actual sign itself or just the message it contains?

Moderator: Content, in the main content, if you have any comment about the presentations, certainly and we will have two kinds of messages; ones that are just plain text and others that come with an image, the same message and then we'll compare one with the other. But at this point, try to zero in on, on whether the content you think could be useful or meaningless.

Participant: Useful. I almost don't believe it when I read it. Fifteen million, you're talking about...

Participant: It's a very big number...

Participant: I had to read it three times to actually understand that it was just for a single spinal chord injury

Moderator: You know, the majority of people who suffer spinal chord injury are in their early twenties, so one assumes a lifetime, that's the average lifetime for an Albertan which is 78 years for a male and so when you project from there to there that's when you get the fifteen million.

Participant: I think that would be an important thing to have on one of those things as well. It usually happens to younger people; and also say how many people it happens to per year, I think that would be a really good addition to that.

Moderator: O.K.

Participant: Do spinal chord injuries include things like whiplash.

Moderator: No, no, well, that's why I say *** difficult, what we are looking at injuries, we are looking at some kind of damage to the structure of the spine. The whiplash is muscular, and is many times fake, so is very difficult. There's no way to medically prove that you do have it. If your lawyer can prove, then your on.

Participant: You mean wearing a brace around your neck isn't enough?

Moderator: O.K., any other comment about this text?

*Participant: I just have one. One thing I was thinking was that one very effective part about it is you do have... you talk about one person so it centers in not just these happen in Alberta ***800,000 per person. If you break your spine, this is what it's going to cost you. That has a strong effect, I think.*

Participant: Ya, it does bring it down to a more of a personal level, instead of seeing a really gigantic number, not that 15 million isn't a gigantic number.

Moderator: Ya.

Participant: You don't have to do the math in your head for example, if get a statistic for a thousand people and then you get a number you don't have to sort of relate that back to well for me or per person what does that amount to.

Moderator: O.K., O.K., let's go to the next one.

Moderator assistant: Reducing the number of injuries on Alberta's roads by 15% would pay for 400 new teachers.

Participant: It's something a lot of people relate to.

Participant: I think that's a good one.

Moderator: From our point of view, 15% is highly achievable, is quite reasonable, 30% requires a lot of effort, it's been done elsewhere, but requires a lot of effort, 50% is extraordinary and it has been done elsewhere, but requires a total commitment of government to do something; but that, is something maybe people don't know, are not informed that 15% is reachable, but it doesn't sound like a lot, it doesn't sound like you know something extraordinary. That's our intention.

Participant: That also addresses your question of approaching the government or how do you get through to the government. So, 400 new teachers it is such a button with so many people because there's a few who've been so vocal so it seems on every level of government, that that's what gets through, it's the small but militant few.

Participant: Where are the areas where *** accidents are reduced by 30 or 50% anywhere?

Moderator: The state of Victoria in Australia, has, they began in 1990, strategy, it resulted in 30% in their first year and now if you compare it today with 1990 before the campaign is 50%.

Participant: Wow!

Moderator: Now if you were to count, were to have taken the curve that was developing at that point and project it to 2005, instead of taking the figures of 1990, then you will be more than 50% reduction. Britain and Holland are leading the pack, I can't remember now exactly who is ahead, but Holland, Norway and Britain are extremely safe, possibly the safest places on earth to drive.

Participant: Wow!

Moderator: And the number of collisions, comparing all factors are about 50% from what we have here in Alberta.

Participant: Wow!

Moderator: So, there are models elsewhere.

Participant: How do they do that anyway is it just from policing, public education or what?

Moderator: Well, it's you know sort of systemic approach on a number of levels, You have to engage in ah, there's a lot of public relations sort of public education and government action. I dunno, like 30% of the drivers that are on the street are actually on the job, so if, there are ways to do it. Only what there is a need is for a commitment.

Participant: ***I lived in Victoria and Melbourne in Australia, and they had advertisements on TV that were extremely horrific and gory and it really affected you, and I imagine driver education here in Canada when I was getting my driver's license and they actually showed some of the advertisements here and it makes you think twice about speeding for example was one of them that they had.

Moderator Ya, I know them, almost all they have produced over 45 of those.

Participant: I find that they tone some of those commercials down when they bring them to Canada.

Moderator: Of course, and that's the problem, but we'll talk about that later. So, any other comment about this one? Yes?

Participant: As we were saying, it would be effective for lobbying against the government. What we really are saying is that young male or young people, they're the cause of the majority of the accidents or a large portion of accidents anyway?

Moderator: Ya, they're disproportionately represented, ya.

Participant: *In that one though, they may not be as affected by this one because the young people would not be as interested in the public education system, for example, because they're out of it and it's a long way until they're worrying about their children.*

Moderator: What one is looking at in this context is the things that society is willing to tolerate and sometimes you know people who are sort of moving away from those values that the majority of society promotes, at a certain point feel the pressure if there is such. If there is not, no such, then there's no felt, so sometimes you know in advertising, lots of products get sold to the kids but the kids convince their parents to buy something or other and even though they're not even products for kids, you know kids have their way of convincing parents. So sometimes a reaction of a given group comes as a consequence of the reaction of other groups, so I see a remote possibility there. Let's go to the next one.

Moderator assistant: Approximately 1.6 billion dollars are spent in Alberta every year in health care alone because of traffic injuries.

Participant: *Why would you say traffic injuries instead of traffic accidents?*

Moderator: Because ah, the accidents in general don't exist. It's very rare, extremely rare that you're driving down the road and all of a sudden, you know, a cow falls from the sky, there's nothing that you can do, but when you're basically in traffic collisions, particularly, serious injury collisions, is that what we're zeroing in on that, there's always something that somebody did wrong, and you will find in statistics that ***47% of the drivers involved in injury collisions were driving properly, because they are the victims of the other driver that was not driving properly and ram into them. So when you get to the detail of the investigation we prefer not to mention the word accidents. Sometimes we can talk about incidents which is a guiltless way of referring to something, but we prefer to talk about injuries. That's the problem, I mean we don't like people to suffer. So, if you have a fender bender and it costs you six thousand dollars to fix it, well that's just too bad, you know, but if you have a broken vertebra, that's a different story. So, we want to bring the language into the...

Moderator assistant: This figure also doesn't include just non injury accident figures, and also, this doesn't have I don't think a justice enforcement in all those things, so...

Moderator: That's health care alone.

Participant: *It seems to be one of those statistics that's just kind of a faceless statistic. It's a big number and you go wow and it doesn't really have any impact.*

Moderator: Do you have any idea of, you know like I was giving those examples, but in general, maybe it's too big to figure it out.

Participant: *Ya, cuz I mean you could say, only! 1.6 billion dollars is banked and then, that's not so bad.*

Moderator: If you make good money and you have 150,000 dollars a year salary and you live for fifty years on that. That makes what, in ten years you make a million and

a half and in your fifty years of working life, if you work that long, you will make, you know, if you compare the amounts that... but it's kind of abstract. I wonder, on the one hand I find it overwhelming because it is 25% of the health care budget which is a really large one...

Participant: I'm just saying you should put that in there that it's about 25% of the health care budget. That'd be a figure that people would more understand, like it's oh a quarter of the health care budget is going just for this. Then you mentioned it's not accidents, it's injuries and then you know people might think that there's something they can do about it, not just oh it's just an accident and can't do much about that.

Moderator: Ya, there is a... we send a message because we believe it's an important ***, but at the same time we don't know how to put it so that people see the ***

Participant: You know, I think when you put big dollars and associate it even remotely with government, for me it's like it erases, because I think of the pointless spending, the scandals, what's 1.6 billion dollars, does the government really care, you know, but when it's 25% and that we are controlling it, ya...

Moderator: O.K. Let's go to the next one.

Moderator assistant: Traffic collisions cost Albertans 3 billion per year, nearly matching the funding that grades K to 12 receive for education.

Moderator: And this is not just health care alone, you know when we compound things. Health care, education K-12 is 3.2 billion, that's the budget, so, how you see that comparison?

Participant: That gives you something to compare it to, you know, the big number compared to education and you see it's a big impact.

Participant: That's a lot of children that can go to school if we increase that.

Moderator: Ya, you know there is a problem in education in Alberta. The number of kids in the classes is growing all the time, so teachers feel a lot of pressure and they sort of complain, because they consider that 32, 35, 38 in a classroom is too many like, two is too many for me.

Participant: I think that message is very effective. It's very clear and personalized.

Moderator: I don't know if I will remember later so I say now, do you have any after idea, after you leave here, you have my e-mail, so any after thoughts, you know something that then you kept on thinking, should.... O.K., let's show the next one.

Moderator assistant: Reducing the number of injuries on Alberta's roads by 20% would pay for 1,324 hospital beds.

*Participant: So this*** is just beds themselves; this is like a place in a hospital.*

Moderator: Ya, and that's a little bit difficult to understand maybe.

Participant: I think it's good when you target a certain group of people, for example,

if you do the education system, that would be targeting you know, middle age people with kids and this one might include the elderly, right, cuz I mean health care's gonna cost a lot due to a lot of the aging population I guess, so...

Moderator: If we were to choose one comparison, say would you go for this or would you go for the 400 teachers?

Participant: I think the 400 teachers. It says more.

Moderator: O.K.

*Participant: ***what about the 1,324?*

Moderator: I was going to ask you that, how do you react to the specific number? Or do you think we should just round up things?

Participant: A thousand hospital beds, 15%, like that seems to be would be more clear to me... cuz people can take that they remember it and say it to their friends.

Moderator: O.K.

Participant: To me, the actual the whole number itself, not rounded, kinda, it seems like more of a real number versus some statistic.

Participant: But the 1,324 beds, again you don't know how much it is in relation to, there might be 500,000 beds in Alberta, so you don't know if that is really significant.

Moderator: Ya, you don't know how many there are in Alberta, that's the problem, so you don't have a comparison. Sometimes is, you know the choice is whether you give an actual number or whether you give a percentage, that's what you know we're trying to sense here.

Participant: Well even if it said could provide 1,300 more hospital beds, that might clarify.

Participant: Where would an ad like this be displayed?

Moderator: Oh, that's the second stage. We don't know exactly how we will do this. At this point we are concentrating on content. See what could touch the sensitivity of the public. O.K., let's show the next one.

Moderator assistant: The increase in collisions has led to a 350% rise in Alberta's auto insurance premiums in the last 15 years.

Participant: I think that means something to everybody, no matter what age group they are, as long as they drive.

Participant: That's where you're gonna hit the young Participants, that if they're screwing the numbers because they're higher, that hits the wallet and ya.

Participant: I kind of doubt...

Participant: It says something personal for everyone, because everyone's gonna be affected who drives and everyone's gonna drive after they're sixteen, like most people will, so it will hit the whole population.

Participant: Maybe I'm just really skeptical, but any number that comes from the auto insurance industry I don't believe. Like is that the auto insurance industry saying that they had to increase premiums or where they just wanting more money? But that's like not what I see right away.

Participant: It's still pretty effective though, like even if the correlation isn't necessarily 100% right, I mean it's still a pretty shocking figure.

Moderator: How do you compare let's say 350% to three and a half times as a way of expressing a relation?

Participant: Three hundred and fifty percent sounds better.

Moderator: O.K. let's go to the following one.

Moderator assistant: A single injury due to a traffic collision costs as much to treat as 31 MRI scans.

***Moderator: Reactions?

Participant: It's very confusing.

Participant: It's not very confined.

Participant: Is it like the average injury?

Moderator: Ya.

Participant: O.K.

Moderator: If you get all the injuries and you from the ones that cause 800,000 to the ones that cause 800 dollars you get 6,800 is the average cost per injury.

Participant: I think if you got rid of "to treat" it would read clearer, but I don't know if that would change the data.

*Participant: Like the average injury due to traffic collisions costs ****

Participant I kinda think it doesn't really mean much to me. I've got a general idea of what an MRI scan is, but I don't know exactly what it does, it doesn't really mean that much to me.

Participant: Or how much it would cost.

Participant: I think it's good though, cuz the media is using MRI scans so much in their news pieces, about waiting lists. It's one of those things that you know, Ralph Klein wants to privatize, is things like MRI scans. So I think it's on everybody's mind I think it's...

Participant: Ya, that's true

Participant: Like even if they don't know what it is, you know it's expensive and... It sounds expensive.

Moderator: O.K., go for the next one.

Moderator assistant: Non injury collisions cost Albertan's nearly 600 million per year.

Participant: That's crazy!

Participant: Six hundred million doesn't really sound like that big of a number for Alberta. If there's a billion on the end, it sounds bigger.

Participant: That sounds like there's not much you can do about it, like that's just how much it costs, you know like...

Participant: If they're not injured...

Participant: Ya, not me.

Moderator: O.K. Shall we go to the other series?

Moderator assistant: O.K. These are the same messages but they're combined with an image, in no particular order, but I'll read them... Ah, we'll do it again.

Moderator: MRI scans but ***

Moderator assistant: Ya, this is the same one. A single injury due to a collision costs as much to treat as 31 MRI scans.

Participant: I like the picture.

Moderator: Ya, at this point we are shifting a bit the center, O.K. you can keep on talking about content. The question is, you feel it's more effective with an image or do you feel it's more effective just plain text? That might vary from case to case. So, what do you think? You think that with an image improves...

Participant: Yes.

Participant: I don't know if you want us to discuss this but I think the text seems a little bit small and kind of tucked over to the side.

Moderator: O.K., no, please... every comment, you know.

Participant: And the font. I'm just wondering um, I'm bringing the age average way up, it's something that I'm familiar with and brought up with, it's something that um would affect the people reading it or you know, most things that I see now are not that font.

Moderator: What do you find it dated? Soft?

Participant: Almost, maybe not quite but almost retro.

Moderator: Um, O.K.

Participant: It's boring for what it's trying to say.

Moderator: Ya, uh huh.

Participant: To me, when I see something in a font like that it seems like it's something out of a text book, so it seems like it's more true and text books generally people consider boring. The boringness doesn't arise here, I just see it looks more factual.

Participant: Cuz that picture is very stark and the writing is like what you would see on an invitation, you know.

Moderator: It can be very boring.

*Participant: I know when I saw that picture I kind of related it back to what I see on the news, when people are talking about health care, they always show someone going in through the... Now I actually know what MRI is *** before, so.*

Moderator: O.K. Let us show the next one.

Moderator assistant: O.K. Non injury collisions cost Albertans nearly 600 million per year. I think we can start with***through the whole thing.

Participant: The car door...

*Participant: Ya, ***bodywork.*

Participant: Ya, it's really hard to tell what that picture is of. The line going through it is just...

Participant: Like abstract art

Moderator: And I guess from the group that in the grand scheme of things is at the bottom end of the importance that you provide for these messages.

Participant: Oh ya. This has the least impact out of all of them.

Moderator: It's only like 600 million.

Participant: I actually didn't even look at the text. I was just trying to figure out what the picture was, and the time that people would spend actually paying attention to these ads. The picture would be only what I would focus on. But then wouldn't we look for the words to figure...

Participant: Ya, I did after, ya

Participant: So they might give more attention to it that way.

Moderator: And maybe the words have to be a little bit more sort of prominent, on your face.

Participant: No, but I'm just saying the time that a person would give to an ad like that. I would now focus on the picture versus the words, so like...

Moderator: Well that's what I think that possibly there should be more integrated, so that you cannot not just choose one or the other. O.K., what else.

Moderator assistant: Traffic collisions cost Albertans 3 billion per year, nearly matching the funding that grades K to 12 receive for education.

Participant: I like that one. It reminds me of an Ikea ad. It's got the same kind of washed out picture to it, but it makes you look at it, you really. It's a good graphical image.

*Participant: And that little Participant looks like a normal little Participant, she doesn't look like a stylized ***.*

Moderator: And comparing to the pure text? Do you prefer this over the other?

Participant: This kind of provides a face to the image. Well for some things a face isn't all that good, I mean in the MRI image actually there wasn't a face.

Moderator: O.K. Let's go to the next one.

Moderator assistant: Fifteen million, the direct health care cost for a single spinal chord injury over a patient's lifetime.

Participant: Why is there nobody in the chair?

Participant: Too many accidents.

Participant: I like the 15 million, that sort of stands out from everything else.

Moderator: But you think that ah, it would be better with somebody.

Participant: Make it personal, ya.

Participant: This one, I actually liked the just plain text better, because 15 million is the first thing you see. That's why it's centered in the middle.

Moderator: Any other? O.K., let's move to the next one.

Moderator assistant: Reducing the number of injuries on Alberta's roads by 20% would pay for 1,324 hospital beds.

Participant: It looks better with the picture.

Participant: Ya, it looks good with the picture.

Moderator: Any other comments?

Participant: When I look at this I see those hospital beds and I see O.K. for 1,324 for those hospital beds, it doesn't seem like much. If you showed like a whole entire hospital room with all the equipment all the way around it. Then it would feel like it was more.

Participant: Or like a bed in a private room, not a private room but with, you know how they have those ones out in the hall and then you have the wards, like normal

beds like those. This one seems like oh they're just gonna stick 'em all around the hallway, up and down the corridor, you know. Is that really a way to treat people when you're in a hospital. I mean personally I'd much prefer a private room or a semi private anyway.

Participant: I think if you had a person in the hospital, that it would say more than just 1,324 hospital beds, it would mean there would be people in those 1,324 beds.

Participant: I disagree. I don't think you need a person there in the picture. I think it's effective just with the hospital bed.

Participant: It's readily available. It's not already being used.

Participant: Like that's mine.

Participant: There will be one there for you when you need it.

Moderator: Ya, one thing I think we have to solve is the ambiguity of the term. Let's say hospital bed as being a bunch of you know, pieces of things that have horizontal surface on the top or the notion of the hospital bed which is a 1,000 dollars a day kind of thing, so there's service that comes with, you know when you say there's no beds in the hospital until you know, September. That doesn't mean that there are no beds. It means that there's no service that can go around with*** I haven't found a way to put that clear. Some people seem to understand that thing that you see there is what costs. So, I dunno, we have to address that. Let's go to the next one.

Moderator assistant: Approximately 1.6 billion dollars is spent in Alberta every year on health care alone because of traffic injuries.

Participant: This cupie has been drinking it.

Moderator: Any other comment?

Participant: This one also doesn't seem to have very much impact. Maybe it's because of the cute picture, I'm not sure.

Moderator: O.K. Let's go to the next one.

Blaine: The increase in collisions has led to a 350% rise in Alberta's auto insurance premiums in the last 15 years.

Participant: You could put a male figure standing by the car.

*Participant: I really like that picture but it almost looks like it's an ad for a rack. It *** or something. Cuz of the starkness of the background.*

Participant: Like a war zone.

Participant: I don't know if it's a bad thing, I mean it get's your attention.

Participant: Ya, maybe something a little more urban, with you know, the ambulance in the picture.

Participant: Ya, maybe not so harsh.

Participant: I dunno, I see a human side to it, that if people see the humanness in it, that's how it would affect me, like even the one with the little Participant, just thinking of anything associated with the little kid and health care just about brings tears to my eyes thinking that it could be a little kid that's involved in that; it does me in.

Moderator: Any other reaction to the image, you know the image in this Afghanistan thing.

Participant: It doesn't look very Canadian for sure.

Participant: I think people might associate those types of accidents with causing the rise when, causing the rise in the premiums, when it's really maybe just everyday things like a fender bender or something like that.

*Participant: ***normal. Coincidence?*

Participant: Ya, I guess maybe if you had that collision you don't really know if someone would actually walk out of that one.

Moderator: You know the thing of the insurance is quite interesting because I haven't seen exactly what it means from a legal point of view, but now they have agreed that there is a cap for how much an insurance company will pay a victim for health care and well who pays the rest, you know is the question. So, if you as an individual driver learn that your cap is, you know, your insurers cap is a million dollars and you get involved as a guilty party in an injury collision and it happens that the cost is 3 million, where are you going to get the other 2 million from? I don't think it is an equation that has been clearly outlined for the...

Participant: It would probably result in another lawsuit against the other person's insurer that would take like...

Moderator: Forever.

Participant: Take years

Moderator: There is a *** that came as a consequence of this which I dunno, I haven't looked into that, but I think that if people were to know clearly, O.K. after 1 million you know, you are safe, but beyond that, you have to pay. You will get kind of strange, you keep the car at home for Sunday afternoons. Anyway, that was just an aside. Any other comment about this picture. You think, some of you think that it could be, some of you think that it should be more Canadian that there should be more human touch, be less warlike looking, more urban you say.

*Participant: *** less serious maybe have someone, like we're adding somebody else now like even like fenders *** broken there, it's not necessarily the big things that cause the rise, it's all the little accidents kind of add up.*

Participant: How do you find collage pictures or um you know, like that quarter like

for a different collision something like that.

Moderator: I dunno.

Participant: I think, I mean it's talking about insurance premiums, I almost wish there was a picture looking at something about the insurance industry.

Participant: Someone smiling at a desk.

Participant: Shady Participants, ya.

Participant: Like maybe people exchanging insurance information right after a fender bender, something just so it shows that's what they're doing.

Participant: It's a grim situation.

Moderator: O.K. Let's go for the next one.

Moderator assistant: Reducing the number of injuries on Alberta's roads by 15% would pay for 400 new teachers.

Moderator: Do you prefer this way or without the image?

Participant: I like it that way.

Participant: This one.

Participant: I would show a crowded class though.

Participant: Ya, there's an empty desk over there.

Participant: I don't like it to be like not focused. It looks weird to me, I like the first part focused on the other one.

Moderator: O.K. so you tend to prefer this, you think the room should be filled, showing it kind of thing. Any other thing? Wait, do you have any thought about that logo, the collision thing at the bottom with the dollar signs cuz we plan to use something like that in every message so that people tune in with, O.K. know what your talking about when you see that.

Participant: I like it but did you think about doing it in green.

Moderator: Sort of dollar colour?

Participant: Ya.

Moderator: Rather than pain colour?

Participant: I like that logo the way it is. It's a very significant logo. It's kinda like you know, you see the MADD logos everywhere. Looks like it's a big organization.

Moderator: We might change the colour of the thing from ad to ad and you know it's funny, I'll tell you something. There was a road intersection in country road where they were always having collisions because never, nobody drove there and everybody

who went through, thought that he was alone and so they put a blinking yellow light to call the attention that there was an intersection and nothing happened, it kept on crashing. They put a red flashing light you know, to see if that would help and nothing happened until they put a blue flashing light. It seems that drivers didn't know what it meant and so they started slowing down and watching. It's a good idea, strategy, you know. Instead of having the red 5 dollar out we can keep on changing. People start wondering what does that mean. It's a desperate effort, so anyway, I, do you have any other general thing that you want us to take home tonight in addition to the comments you dropped so far? O.K. so ah we thank you very much for having come and done this job and now is pay time. So we have a collective... (end of recording).

Appendix 2

Message 1, to be posted at the University of Alberta Campus

November, (date) 2004

Dear students and staff at the University of Alberta

Research on public reactions to messages about cost of traffic injuries

Approximately 1.6 billion dollars are spent in Alberta every year in health care alone for traffic injuries. When other areas are compounded (police, justice system, loss of work days, property damage, etc) the cost reaches about 4 billion dollars.

To develop a campaign that will increase public awareness about the cost of injuries, and persuade government to invest in traffic safety, we are requesting volunteers to participate in a focus group that will provide comments about a series of messages that are being developed. Males and females, drivers and non-drivers are welcome.

The meeting will be held in a seminar room at the University of Alberta. Specific location will be informed to volunteers at a later date. Parking and refreshments will be provided. Each meeting will last about 90 minutes. Participants who stay for the full meeting will receive a \$25 honorarium.

The session will begin with a set of questions, followed by a request for comments in connection with approximately ten different visual messages. These visual messages will relate to the cost of traffic injuries for the Province of Alberta. No names will be included in the summaries of the sessions, whose aim is to provide feedback for the improvement of the effectiveness of the projected messages, and participants will be able to withdraw at any time.

The meeting will be held at 7 pm, on (day of week, date)

If you are willing to participate, please write to Moderator Frascara
<frascara@ualberta.ca>

Or by post to:

Jorge Frascara

Department of Art and Design

University of Alberta

Edmonton, AB T6G 2C9

By Fax: 492 7870

Campus address: J. Frascara, Art and Design, Room 3-98 Fine Arts Building

Please provide a contact address, or email in your response.

Appendix 3

Message 2. Letter to be mailed to Alberta Motor Association list

Edmonton, November, (date) 2004

Mr/Ms

Dear....

Research on public reactions to messages about cost of traffic injuries

Approximately 1.6 billion dollars are spent in Alberta every year in health care alone for traffic injuries. When other areas are compounded (police, justice system, loss of work days, property damage, etc) the cost reaches about 4 billion dollars.

To develop a campaign that will increase public awareness about the cost of injuries, and persuade government to invest in traffic safety, we are requesting volunteers to participate in a focus group that will provide comments about a series of messages that are being developed. Males and females, drivers and non-drivers are welcome.

The meeting will be held in a seminar room at the University of Alberta. A specific location will be informed to volunteers at a later date. Parking and refreshments will be provided. Each meeting will last about 90 minutes. Participants staying for the full meeting will receive a \$25 honorarium.

The session will begin with a set of questions, followed by a request for comments in connection with approximately ten different visual messages. These visual messages will relate to the cost of traffic injuries for the Province of Alberta. No names will be included in the summaries of the sessions, whose aim is to provide feedback for the improvement of the effectiveness of the projected messages, and participants will be able to withdraw at any time.

The meeting will be held at 7 pm, on (day of week, date)

If you are willing to participate, please email, fax or mail me at the address below. I will really appreciate your presence in the one of the groups.

Sincerely,

Jorge Frascara
Department of Art and Design
University of Alberta
Edmonton, AB T6G 2C9
Fax 492 7870
<frascara@ualberta.ca>

Please provide a contact address or email in your response, or fill and fax the enclosed form.

Appendix 4

REPLY FORM

To Jorge Frascara

Fax 492 7870

Research on public reactions to messages about cost of traffic injuries

I am willing to participate in a focus group to be held at the University of Alberta Campus

on

I understand that parking and refreshments will be provided; that the meeting will last about 90 minutes; that as a participant I will receive a \$25.00 honorarium; that my name will not be mentioned in any report; and that I may withdraw from the meeting at any time.

Please fill the appropriate spaces

I need parking reservations _____

I do not need parking reservations_____

Name and last name

Address

Email address if available

Appendix 5

Letter to Participants

Dear participants in the focus group,

Thank you for agreeing to participate in the focus group that will be held on Tuesday, January 25th, at 5:30 pm. The meeting will last until 7 pm and those staying for the duration of the meeting will be paid \$30 (thirty dollars) at the end of it.

The meeting will be held in room 2-24, Fine Arts Building.

The Fine Arts Building is a brown brick building located at the corner of 112 Street and 89 Avenue. When you enter the building, go to by the main stairs to the second floor and walk toward the passage to the Law Building (opposite to the passage for the HUB Mall). You will first walk past the men's washroom on your right, a set of glass doors, and the Art History lecture Room 2-20 on your right. Room 2-24 is immediately there on your right.

Refreshments will be served.

The meeting will include 14 volunteers, myself as leader and my research assistant Blaine Bertsch, Master of Design student. We will be assisted by Clint Carlson, also graduate student in our program.

The session will begin with a set of questions, followed by a request for comments in connection with eight different visual messages. These visual messages will relate to the cost of traffic injuries for the Province of Alberta. No names will be included in the summaries of the sessions, whose aim is to provide feedback for the improvement of the effectiveness of the projected messages, and participants will be able to withdraw at any time.

Please let me know if you need parking.

I will also appreciate your letting me know if you cannot make it.

See you on the 25th.

Jorge Frascara
Professor and Coordinator
Visual Communication Design
Department of Art and Design

Appendix 6

Message 3 response letter to volunteers who requested parking

Edmonton, [date]

Research on public reactions to messages about cost of traffic injuries

Mr/Ms

Dear...

thank you for your positive response to our invitation. I look forward to meeting you on[date]

The meeting will take place in room 2-24, second floor, Fine Arts Building.

Further to your request, there will be parking reserved in your name. When arriving in the campus, please enter the parking lot at 111 Street and 90th Avenue. Identify yourself at the booth, and you will get a parking permit that you have to display on your dash. Please turn left after passing the booth and park close to the Fine Arts Building, which is the brown brick building you will be facing on your right after turning to park.

I look forward to seeing you on....

Jorge Frascara
Professor
Department of Art and Design
<frascara@ualberta.ca>
Telephone: 492 5092 / 492 3261

Appendix 7

Message 4: response letter to volunteers who did not request parking

Edmonton, [Date]

Research on public reactions to messages about cost of traffic injuries

Mr/Ms

Dear...

thank you for your positive response to our invitation. I look forward to meeting you on [date]

The meeting will take place in room 2-24, second floor, Fine Arts Building.

The Fine Arts Building is a brown brick building located at the corner of 112 Street and 89 Avenue. There are several buses that come to the Campus and the LRT has its University station on the corner facing the Fine Arts Building.

I look forward to seeing you on....

Sincerely,

Jorge Frascara
Professor
Department of Art and Design
<frascara@ualberta.ca>
Telephone: 492 5092 / 492 3261

Appendix 8

Research on public reactions to messages about cost of traffic injuries

Letter of agreement

Edmonton, _____

I _____ agree to participate as a member of a focus group and as a respondent to a questionnaire for the above research project conducted by Professor Jorge Frascara and his assistant, Master Student Mr. Blaine Bertsch.

I understand that my name will not be used in any report related to this project. I will receive a \$30.00 honorarium on the basis of participating in the full meeting, but I may withdraw at any time.

Group participant name and signature

Jorge Frascara _____	Blaine Bertsch _____
Principal researcher signature	Research assistant signature

Appendix 9

Research on public reactions to messages on cost of traffic injuries

Opening statement

Good evening, and welcome to our session tonight. Thank you for taking the time to join our discussion of driving and driver behavior.

My name is Jorge Frascara, I am a Professor of Visual Communication Design in the Faculty of Arts at the University of Alberta. To my left is Mr. Blaine Bertsch, a graduate student in the Department of Art and Design whose thesis I supervise and who acts here as a Research Assistant. We are engaged in a research on cost of traffic injuries, and in ways of communicating those costs so that people and government became more aware about them and motivated to take action. The ultimate objective of the project is to develop a public campaign that will help us all prevent traffic accidents.

Tonight we will organize the activities in two parts: in the first one we will ask you a few questions about likes and dislikes regarding driving. In the second part you will be shown a series of messages and will be asked for your opinion about them. There are no right or wrong answers; rather there are just many different points of view. Please feel free to share your points of view, even if they differ from what other have said.

Before we begin, let me remind you of a few ground rules:

This discussion is strictly for the research project; it is not a sales meeting, and no sales solicitation is involved.

Please speak up - only one person should speak at a time. We will be tape recording the session because we don't want to miss any of your comments. If several people are talking at the same time, the tape will be garbled, and we might be unable to understand what you said. We will be on a first name basis tonight, so I'm just George, and my assistant is Blaine. In our later reports there will not be any names attached to anyone's comments. Keep in mind that we are just interested in negative views and positive views, and, at times, the negative comments can be most helpful.

Our session will last about an hour and a half, and we will not be taking any formal break. As you can see, the food and beverages are over by the back wall. Feel free to leave the table to pickup something or if you feel you need to stretch, but please do so quietly.

We placed name cards on the table in front of you to help us during the conversation if we have to address someone or refer to what someone has said.

Let's find out about our opinions by going around the table one at a time for the first question.

Appendix 10

Research on public reactions to messages on cost of traffic injuries

Focus Groups opening questions

1. Tell us what you like most about driving?
2. What kinds of things do you dislike most about driving?
3. What do you think are the most common causes for injury collisions in Alberta?
4. Are you aware of the number of traffic injuries in Alberta?
5. Are you aware of the cost of traffic injuries in Alberta?
6. Now that you are aware, do you think that knowing this can affect government officials take the problem more seriously?
7. Now that you are aware, in what ways you think we can reduce that cost, persuade the public to take more care of their wealth?
8. In what ways you think we can persuade the government to take action, so that our treasured Health Care system can rid itself of the financial and infrastructural pressure created by injuries, and be better equipped to deal with the ill?

Now we are going to show you ten prototypes for messages Blaine and I have been preparing, and we will like to collect your opinions and reactions to them. Please be candid about your reactions, and tell us if you think these messages might help raise people's awareness about the traffic injuries problem and might prompt them to do something about it, like drive more carefully or write to government.

(The experimenters will show the designs and collect the comments)

Appendix 11

Research on public reactions to messages about cost of traffic injuries

RECEIPT

Edmonton, January 25, 2005

For participation in the full length of the above focus group, held today, January 25, from 5:30 to 7:00 pm, in room 2-24 Fine Arts Building, I have received an honorarium of \$30 in cash (thirty dollars).

Name and last name	Signature
1 _____	_____
2 _____	_____
3 _____	_____
4 _____	_____
5 _____	_____
6 _____	_____
7 _____	_____
8 _____	_____
9 _____	_____
10 _____	_____
11 _____	_____
12 _____	_____
13 _____	_____
14 _____	_____

Appendix 12

UNIVERSITY OF ALBERTA

FACULTY OF ARTS, SCIENCE & LAW RESEARCH ETHICS BOARD

APPLICATION TO CONDUCT RESEARCH INVOLVING HUMAN PARTICIPANTS

Principal Investigator

Name: Jorge Frascara

Department/Faculty: Art and Design, Faculty of Arts

Campus Address: 3-98 Fine Arts Building

Campus Phone number: 492 5092/ 3261

E-mail address: <frascara@ualberta.ca>

Project Title: Communicating cost of traffic injuries

Funding Source(s): HFASSR Operating Grant, Alberta Motor Association

Summary of Project / Research Design. Please attach a more detailed proposal (i.e., 1-2 pages), including a description of the population from which research participants will be drawn (e.g., university students, nursing home residents) and

a discussion of how research participants will be solicited. Also attach copies of research instruments (e.g., questionnaires, interview guides).

Materials are enclosed

Project description

The objective of the project is to demonstrate to the provincial government that a serious investment in traffic safety communications is worthwhile, and will in the end save substantial amounts of money to the province.

Compilation of statistics about cost of injuries will be used to develop a series of self-contained arguments. These arguments will be used to design visual messages directed at the general public to generate awareness about the need for an improvement of traffic safety in Alberta. Traffic injuries claim today about 25% of the Health budget, but the cost does not stop there: there are police costs, justice system, property damage and days of work lost that add up to about 2% of our GNP (as estimated in different developed regions). I would like to create a series of message that really reach people. To be able to do that, I plan to run three focus group meetings, where prototypes of those messages will be presented and discussed. I need to collect reactions of people to the messages so as to be able to adjust them according to the feedback.

The three focus groups will be formed as follows: one by University of Alberta students. One by residents of Edmonton without university education. One by an aleatory mix.

To request participation by UofA individuals, announcements will be posted through the campus (Appendix 1).

One sample will be drawn by post from members of the Alberta Motor Association. The call for this will not specify educational level required. Another sample will be formed in collaboration with Alberta Transportation from its list of drivers. For these last two samples an invitation will be mailed to 60 people in each list in the hope to obtain 12 volunteers for each group. This is based on my previous experience on the topic. The exact site for the meeting will only be announced once a person confirms his/her intention to attend.

The meetings will be held in a seminar room of the Fine Arts Building. Parking and refreshments will be provided. Each meeting will last about 90 minutes. A consent form will be given to participants at the beginning of the session for their signature.

The sessions will begin with a set of questions. Followed by a request for comments in connection with approximately ten different visual messages. No names will be included in the summaries of the sessions.

Assessment of Risk to Human Participants: [attach additional page(s) if necessary]

I believe that no risk is involved, at least no more than what could be involved in any University seminar course. Human subjects volunteering to participate in the focus groups will be adults, and will be asked to indicate their reactions to visual materials developed for the purpose of the study. These visual materials will present messages related to the cost of traffic injuries for the Province of Alberta. In the call for volunteers there will be a clear indication of the purpose, location, time and mechanics of the meetings.

Description of Procedures to be Undertaken to Reduce Risk to Human Subjects. Please attach copies of consent forms and other similar documents.

All the textual materials to be used for the project are enclosed.

I have read the UNIVERSITY OF ALBERTA STANDARDS FOR THE PROTECTION OF HUMAN RESEARCH PARTICIPANTS [GFC Policy Manual, Section 66] and agree to abide by these standards in conducting my research.

Signature of Principal Investigator

_____ Date: October 19, 2004

Submit completed form and attached documents to:

Dr. Lynn Penrod, Chair
Arts, Science, Law Research Ethics Board
Office of the Dean of Arts
6th Floor, Humanities Building
mailto:lpnrod@ualberta.ca
Phone: 492-3584 June, 2003

To demonstrate my experience in the subject, I enclose a list of relevant publications I authored or edited in relation to the topic in question:

1. Books and monographs

J. Frascara (ed), *Design and the Social Sciences: making connections* (London and Washington: Taylor & Francis), 2002.

J. Frascara, *El Poder de las Imágenes* (The power of images), Ediciones Infinito (Buenos Aires) 1999.

J. Frascara, *User-Centred Graphic Design: Mass Communication and Social Change*, Taylor & Francis (London and Washington), 1997.

2. Technical and research reports

J. Frascara, *Profiling the Alberta Road User*, prepared for the Traffic Safety Summit 1998, organized by the Mission Possible coalition. Funded by the Alberta Neurotrauma Foundation, October 1998, 76 pp.

J. Frascara, *Safe Traffic Education for new Drivers: A Proposal for Revisions to the Alberta Motor Association Driving Course*, Research Report, 1993, 18 pp.

J. Frascara (principal investigator), A. Finn, H.L. Janzen, J.G. Paterson and Z. Strickler-Wilson, *Traffic Safety in Alberta; Casualty Collision and the 18-24 Year-Old Male Driver: Criteria for a Targeted Communication Campaign*. Research report. Alberta Solicitor General and Alberta Motor Association. Edmonton, 1992, 262 pp.

J. Frascara, A. Kalsi and P.Kneebone, *Graphic Design for Development*, Unesco, Paris, #AEB/A No. 12, Final report on conference held in Nairobi, 1987, 66 pp.

J. Frascara, A. Kalsi and P. Kneebone, *Graphic Design for Development*, Unesco, Paris. Discussion paper for conference, 1986, 14 pp.

J. Frascara and Tony Yau, *Evaluation and Development of Safety Symbols*, report to the Standards Council of Canada, 1986, 224 pp.

T.M. Nelson, T. Nilsson and J. Frascara, *Information and Warning Signs on School Buses*, Revision of Visual Design, Alberta Transportation, 1980, 14 pp.

J. Frascara, *Recognition of Public Information Symbols*, field test, International Standards Organization, 1975 program.

3. Reports and special issues edited

J. Frascara (ed) *ISO Technical Report 7239, Development and Principles for Application of Public Information Symbols*, Geneva, 1984.

J. Frascara (ed), *Environmental Information Systems, Icographic*, Special Issue, vol.2, No.1, 1982.

4. Articles and book chapters

J. Frascara, "User-Centred Graphic Design" International Encyclopedia of Ergonomics and Human factors, Taylor & Francis, 2002.

J. Frascara, "Information Design and Cultural Difference", Information Design Journal, Reading University, Milton Keynes, vol.9 # 2-3, 2000, pp. 119-127.

J. Frascara, "Cognition, emotion and other inescapable dimensions of human experience", Visible Language, 33.1, Rhode Island School of Design, Providence R.I., 1999, pp 74-89.

Nelson, TM, Nilsson, TH, Piercey, DJ, Johnson, T, Frascara, J, Silva Delano, S, Susuki Sone, E, and Villalon Bravo, M, "Improving Perception of Letters and Visual Structure of Language" Perceptual and Motor Skills, 1999, 88, pp 515-530

J. Frascara "New Observations on Cognition and Attention", in Vision Plus 4, The Republic of Information, Conference proceedings, Carnegie Mellon University, 1998, pp156-167

J. Frascara, "Communications for Change: Strategies and Difficulties", Design Issues, vol. XII No. 3 MIT pp 44-59

J. Frascara "Learning Styles, Value Systems and Visual Environments of Young People" in Novice Driver Education, 1993 Symposium Proceedings, Alberta Motor Association, Edmonton, 1997, pp 175-186, invited.

J. Frascara, "Graphic Design: Fine Art or Social Science?", The Idea of Design, R.Buchanan and V. Margolin (eds) MIT, Cambridge & London, 1996, pp 44-55 (Anthology of articles published in Design Issues)

BLAINE BERTSCH

604 Hunters Close, Edmonton, AB CANADA T6R 2W2

Phone: (780) 431-9785 E-mail Address: bbertsch@ualberta.ca

EDUCATION

Master of Design (2007)

Department of Art & Design, University of Alberta

Thesis: Designing messages to communicate the cost of traffic collisions to generate public support for traffic safety action

Supervisors: Jorge Frascara & Bonnie Sadler Takach

Bachelor of Design, University of Alberta (1996)

Advanced High School Diploma, Harry Ainlay Composite High School (1991)

PRESENTATIONS

Bertsch, B. A. (2003) *Content expert as Designer*. Paper presented at the Communicational Spaces Conference, University of Alberta, Edmonton, AB

Blaine Bertsch and Andrea Ruskin. (2004). *Digitizing the Canada Food Guide: Creating a Digital Dietary Planning Resource for University Students*. Research poster presented at Communications Across Contexts, Master of Arts in Communications and Technology Symposium, University of Alberta, Edmonton, AB.

WORK EXPERIENCE

Fission Media Group Inc. 2005 – present

Partner/Creative Director

Fission Media Group is a film and digital media production company based in Edmonton, Alberta, Canada. We offer a unique combination of skills in the design of high-end digital media, along with a proven record in the production of broadcast film and video. Clients include: CBC Television, Rocketfuel Productions, Government of Alberta, Royal Tyrrell Museum, Telus World of Science, CN Rail, Edmonton Fire Rescue

Fuelinject Design (Formerly Metatonic Visual Media) 1999 – 2005

Owner/Creative Director

FUELinject Design is a graphic design and digital media production company based in Edmonton, Alberta, Canada.

Clients include: Government of Alberta, The King's University College, Alberta New Media, Frost & Associates Realty Services Inc., The Hockey Players Corporation, Moen Woodworks, Grant MacEwan College

Department of Art & Design, University of Alberta September 2001 – April 2006
Sessional Instructor

Courses include DES 595, DES 596 - Interactive Media I & II, DES 496

Grant MacEwan College December 2006 – present

Consultant responsible for hiring instructors for the Centre for New Media

Grant MacEwan College July 1999 – December 2006

Consultant responsible for the operation of the Centre for New Media

Responsibilities: Course development, scheduling and marketing; Management of human resources for the Centre; Lab, hardware and software planning; Client contact, information and sales; Development of custom training programs for businesses

University of Alberta Extensions September 2001 – April 2002

Instructor

Responsibilities: Course development and instruction, Media for the Web, Web Developer Program

Grant MacEwan College September 1998 – April 2002

Instructor

Responsibilities: Course development and instruction, Typography, Visual Communication Design Diploma Program & Centre for New Media Courses

Boldface Technologies Inc. June 1996 – July 1999

Graphic Designer

Responsibilities: design and development of print and electronic projects

University of Alberta January 1996 – April 1996

Teaching Assistant

Department of Art & Design, Assisted Professor Peter Bartl

Memberships & Affiliations

Digital Alberta 2006 – present

Director

- Market Access Program Chair

Graphic Designers of Canada/Alberta North 1998 – 2001

Director

Served as the VP Education for the Alberta North Chapter

Represented the chapter president at the Annual General Meeting in 2000

Alberta New Media 1998 – 2003

Director

Committees included: Marketing Communications, 2001 New Media Awards, Web site Development

